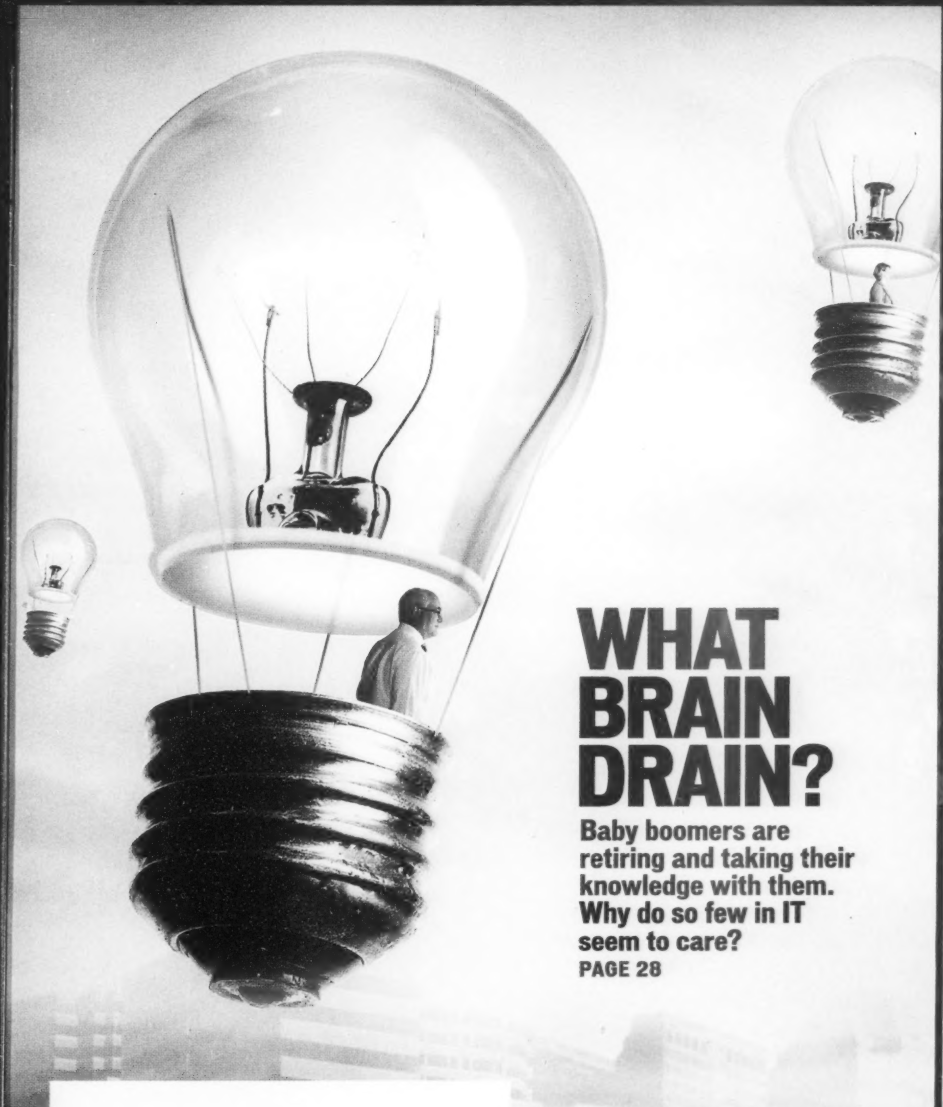
Ethical Outsourcing: Advocates say socially responsible outsourcing is good for your conscience and your company. **PAGE 32**

COMPUTERWORLD®



WHAT BRAIN DRAIN?

Baby boomers are retiring and taking their knowledge with them. Why do so few in IT seem to care?
PAGE 28

Inside

APRIL 21, 2008
VOL. 42, NO. 17 $5/COPY

News Analysis

Modular data centers may boost online services – and reshape internal IT. PAGE 14

A year after the Virginia Tech tragedy, colleges are finding new ways to send out emergency alerts.
PAGE 20

THE GRILL: Dell's CIO talks about delivering remote IT management as a service. PAGE 24

Opinion

Flush out those morale-sapping, underperforming 'ducks' who hide behind HR. PAGE 40

Careers

Q&A: The state of demand for IT pros. PAGE 41

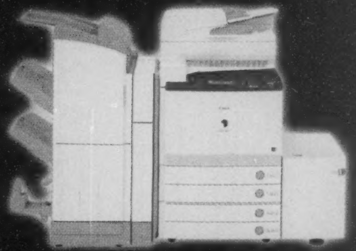
Don't Miss . . .

Multicore CPUs could give cell phones multiple personalities.
PAGE 22

COMPUTERWORLD.COM

IN THE WORLD OF ENTERPRISE INTEGRATION

I need a solution that runs like clockwork or I run the risk of running a lot of stairs.



The Canon Color imageRUNNER

PRODUCE. PERSUADE. PERFORM. ON THE NETWORK.

Color
imageRUNNER®

www.usa.canon.com 1-800-OK-CANON

Canon and IMAGERUNNER are registered trademarks of Canon Inc. in the United States and may also be registered trademarks or trademarks in other countries. IMAGEANYWARE is a trademark of Canon. © 2008 Canon U.S.A., Inc. All rights reserved. Product shown with optional accessories.

Canon
imageANYWARE

Inside

COMPUTERWORLD ■ APRIL 21, 2008

■ NEWS DIGEST

8 The **MySQL** blogosphere erupts over Sun's plan to limit some features to **paying users** of the **open-source** database. | New York plans to **tax products** bought from some **online retailers**, which could net it $50 million in annual revenue.

10 Phishers target CEOs and other execs with e-mails containing fake **federal subpoenas** that could **install malware** on their PCs. | Salesforce.com integrates the **Google Apps** suite with its hosted CRM service.

12 Retailer **American Apparel** plans to expand a pilot program and start attaching **RFID tags** to all of the items in 16 more stores.

■ NEWS ANALYSIS

14 Building-Block Data Centers May Reshape IT. Modular data center technologies could help companies shift to online "compute clouds" – potentially reducing the need for internal IT staffers.

20 Va. Tech Exposes Need to Expand Notification Plans. The shootings at Virginia Tech a year ago galvanized college administrators to improve emergency communications on their campuses.

■ OPINION

6 Editor's Note: **Don Tennant** introduces "Aunt Donna," *Computerworld.com*'s resident agony aunt, who leavens her advice with much-needed humor.

40 Bart Perkins says that when morale-sapping, underperforming "ducks" are hiding behind HR, you need to flush them out.

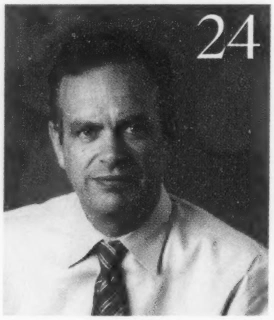
44 Frankly Speaking: **Frank Hayes** suggests that Windows is collapsing and that all that will save Microsoft is a new leader.

■ DEPARTMENTS

YA - YOU GET ALL THESE PERSONALITIES IN ONE PHONE
I WANT SOME FAVA BEANS
"THE SYBIL"
A SMART PHONE FOR BOSSES!
CAN I GET CLINT EASTWOOD, TOO?

22 On the Mark: **Mark Hall** learns how multicore CPUs could give cell phones multiple personalities. And that's a good thing.

24 The Grill: **Steve Schuckenbrock**, CIO at Dell, talks about fighting to regain customer confidence, delivering IT as a service and targeting the global market.



36 Best Places Showcase: **Southern Charm.** Hot technology and warm corporate cultures lure IT workers to the South Atlantic region.

39 Security Manager's Journal: **Enough of Being the Bad Guy.** Projects have gotten security reviews at the last minute once too often. It's time for a new process.

41 Career Watch: Employers get more diligent about screening job applicants' skills.

43 Shark Tank: You see that box labeled "username"? That's where you put your username.

■ ALSO IN THIS ISSUE

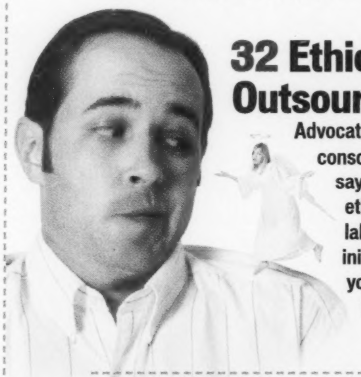
Online Chatter **7**

Company Index **43**

■ FEATURES:

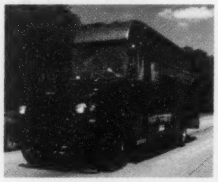
28 What Brain Drain?

COVER STORY: Many companies seem perfectly content to watch baby boomers drift away. So IT shops that are trying to get ahead of the retirement wave are finding themselves with few models to emulate.



32 Ethical Outsourcing

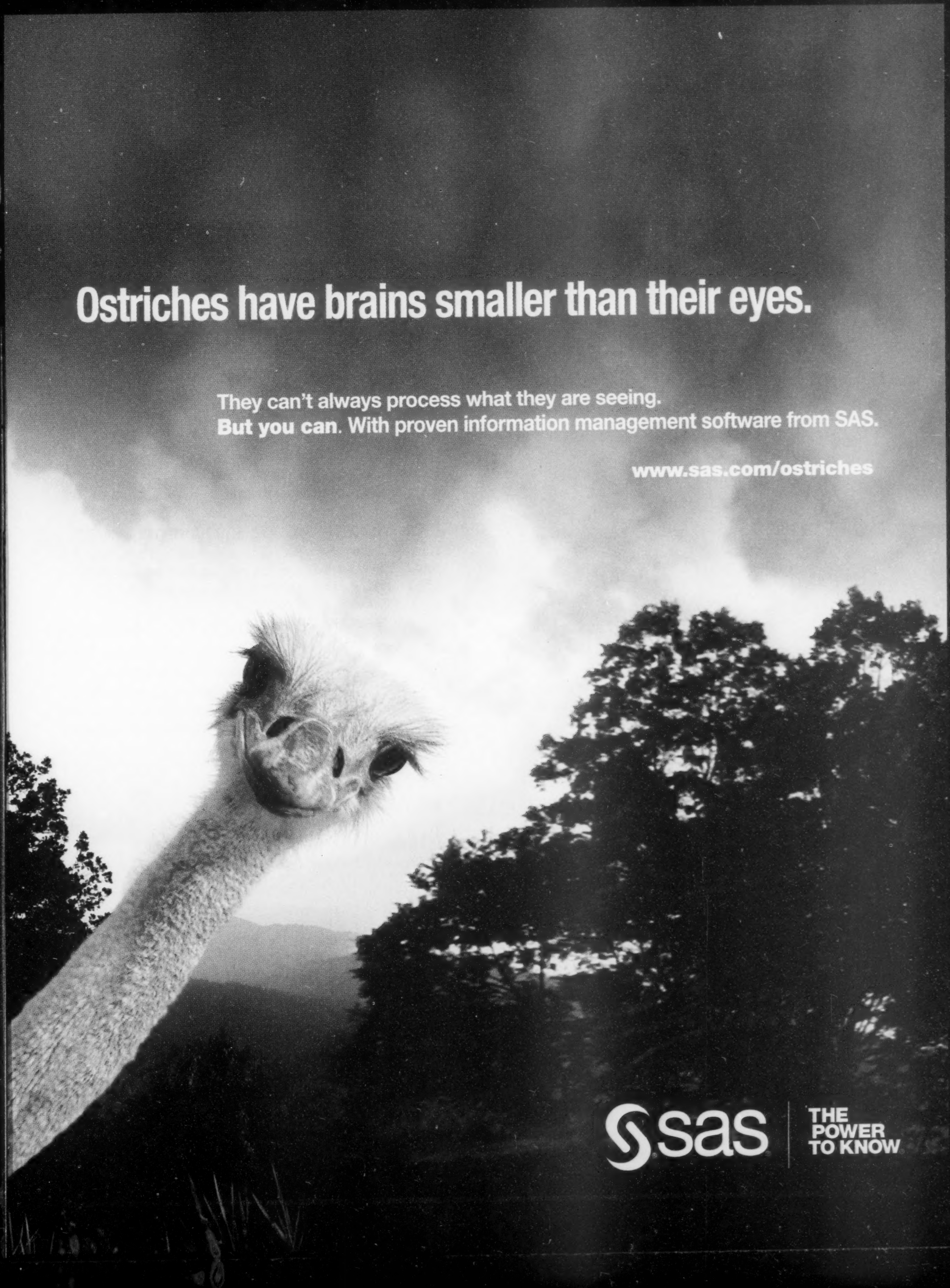
Advocates of socially conscious outsourcing say that incorporating ethical values like fair labor policies and green initiatives is good for your conscience and your company.



38 Special Delivery

UPS is wrapping up a multiyear project to speed package deliveries and save millions of gallons of fuel.

COVER ILLUSTRATION BY STEPHEN WEBSTER



Ostriches have brains smaller than their eyes.

They can't always process what they are seeing.
But you can. With proven information management software from SAS.

www.sas.com/ostriches

sas THE POWER TO KNOW

COMPUTERWORLD.COM

This Week Online

FIND THESE STORIES AT COMPUTERWORLD.COM/MORE

Are iPhones From Mars and BlackBerries From Venus?

Men and women often have different needs when it comes to smart phones. Researchers and industry officials discuss those needs and why a phone that appeals to women is sometimes not appealing to men.

Maddening Frustrations: Computer Use by the Blind

Experts say little progress has been made toward providing accessible Web sites and software for the 1.3 million blind Americans who don't get to experience the full richness of the Internet and the world of personal computing.

Planning a Company Social Network? Don't Forget Privacy Issues

OPINION: Jay Cline believes corporations need to undergo rigorous privacy risk assessments before jumping onto the Web 2.0 bandwagon.

Computerworld Podcasts

Don't have time to read Don Tennant's editor's note? Let him do it for you!

Check out the weekly editorial podcast.

Blog Spotlight

One Phat High-Tech Home Theater

Got an extra $20,000 lying around? If so, you too can assemble the comprehensive audio, video and gaming rig that Lucas Mearian experienced at this month's Storage Networking World conference.

ITIL v3: Five Ways to Make It Work for You

No one disputes that ITIL is the go-to resource for IT service delivery best practices. But which is best for your company: Version 2 or Version 3?

The Truth About People And Cameras: Beware Videoconferencing Pitfalls

Focus on all elements of building a broadcast-quality videoconferencing system, including bandwidth allocation, traffic shaping and end-user training.

Linux Examined: Ubuntu 'Hardy Heron'

Ubuntu 8.04, or 'Hardy Heron,' is now available in beta. The popular Linux distribution offers some updated features along with its usual easy-to-use interface and good support.

Swimming Pool Heated by Data Center's Excess Heat

A Zurich-based company negotiated with local government officials to pump excess heat generated by its underground data center to a nearby indoor swimming facility.

No End in Sight for the WLAN Architecture Wars

OPINION: The debate over the best wireless LAN architecture continues, and columnist Craig Mathias explains why there's no clear winner on the horizon.

SHARK BAIT

Spontaneous Client

One IT professional stumbled across an unsecured wireless network with some revealing photos. So he did what any enterprising individual would do: He offered his services.

ONLINE DEPARTMENTS

Breaking News	**computerworld.com/news**
Newsletter Subscriptions	**computerworld.com/newsletters**
Knowledge Centers	**computerworld.com/topics**

IBM

_INFRASTRUCTURE LOG

_DAY 62: Our power and cooling costs are out of control. We're spending the bulk of our IT budget just keeping the servers cool. I told Gil we need to go green in a big way.

_DAY 63: He took us green...kelly green, to be exact.

_DAY 64: I told Gil you don't go green with paint. You go green with the new IBM Power™ Systems. The Power 550 Express uses 91% less energy and 98% less space compared to a 64-core HP 9000 Superdome. And it gives us 16% more transaction performance running the UNIX® platform[1]...Wow.

_Our data center will be truly green now. And painted white.

Trade up your PA-RISC system with the IBM Power Rewards Program:[2]

IBM.COM/**TAKEBACKCONTROL**/POWER

1. HP 9000 Superdome Enterprise server comparison utilizes 64 cores – 875 MHz PA-RISC 8700 processors 256 GB of memory. Power consumption figures of 1400W for the IBM Power 550 and 16,920W for the HP 9000 Superdome were based on the maximum rates published by IBM and HP, respectively. For complete details, go to ibm.com/takebackcontrol/benchmark.
2. U.S. offering on select models only. More information about this program can be obtained through ibm.com/products/us – enter SPECOFFSP in the NavCode® window. IBM, the IBM logo, Power and Take Back Control are trademarks or registered trademarks of International Business Machines Corporation in the United States and/or other countries. UNIX is a registered trademark of The Open Group in the United States and other countries. ©2008 IBM Corporation. All rights reserved.

■ EDITOR'S NOTE

Don Tennant

Here's to Humor

WHEN I wrote last week about the question of whether we have enough young people graduating from technology-related university programs, I did so in a way that was meant to convey the seriousness of the issue. But there's a not-so-serious dimension to the discussion that warrants equal attention.

My mention of the work of Monsanto CIO Mark Showers, who's helping to shepherd a cooperative education program in which university students spend six months of the year in school and six months at Monsanto, struck an especially serious chord with readers.

"It's a novel idea, what Monsanto has done," wrote Andrew Porter, a senior business analyst at the U.S. Department of Energy. "It's like apprenticeship for the modern-day IT guy. Imagine the competitive edge the U.S. would have if more companies adopted this idea."

But let's acknowledge that there's more to the discussion than what furrows the brow. Because no discussion of young people can possibly be comprehensive without including the element of humor.

Anyone who spends any amount of time around kids knows that they tend to be funnier than we are. It's one of the most enjoyable, endearing traits of people who have yet to be calloused by the daily grind of making a living. And I've yet to find a funnier group of young people than self-professed "geeks."

Among the funniest people I know are my two sons, Don and Dan. Don has a bachelor's degree in computer science from the U.S. Naval Academy and a master's degree in the same subject from Cambridge University in the U.K. Dan is a junior studying interactive media and game development at Worcester Polytechnic Institute in Worcester, Mass.

Dan and his classmates are the first ones to joke about their geekiness. In fact, they've come up with a list of "Top Signs You Are a Geek @ WPI," with well over 500 entries so far. Among my favorites:

- Someone says, "What are the odds?" and you calculate them.
- You have no life and can prove it mathematically.
- You have actually had a conversation in C.
- There are two members of the opposite gender on your bed, and you're on your computer.
- In the bathroom, you can hear people talking about calculus.
- A friend calls you and wakes you up with a homework question, and you can't get back to sleep until you figure it out.
- Your professor asks the class if anyone saw the football game yesterday, and it is followed by a minute of awkward silence.
- Your professor emulates Windows on a Linux machine, and people in the class applaud.
- You know someone who failed all of his A and B term classes due to World of Warcraft.
- You do a little research to prove that the last entry is wrong, since World of Warcraft came out after A term was over.

■ Humor just isn't as pervasive as it needs to be in a field where the demands of the job can far too easily take a toll on the human spirit.

So here's the point: Just as serious programs like the one at Monsanto help to encourage young people to pursue careers in technology, an appreciation of the value of lightheartedness will serve as a natural attraction as well. My concern is that too many in the IT profession, and too many of us who serve it, take ourselves far too seriously. Humor just isn't as pervasive as it needs to be in a field where the demands of the job can far too easily take a toll on the human spirit.

We just can't have that. You need someone you can talk to. Someone who understands the pressures you face. Someone who can provide you with the advice you need when times are tough. Someone who will make you laugh.

You need Aunt Donna.

Beginning this week, Aunt Donna, our resident agony aunt, will respond to your questions and offer the straight-shooting advice that only she can, in a video spot on our Web site that we call "Dear Aunt Donna" (*www.computerworld.com/video/aunt_donna*).

E-mail her at *auntdonna@computerworld.com*, and we'll take it from there. With your help, we'll make sure the smiles outnumber the furrowed brows. ■

Don Tennant *is editorial director of* Computerworld *and* InfoWorld. *Contact him at don_tennant@computerworld.com, and visit his blog at http://blogs.computerworld.com/tennant.*

■ ONLINE CHATTER

RESPONSES TO:

Asperger's and IT

April 2, 2008

As a child, I was a nonresponsive autistic. My parents almost divorced because of the pressure to institutionalize me. I just did not communicate or respond to the world. Eventually, I began opening up, through music and later art. I was exceptional at business administration and law and moved into the Internet field because of my ability to draw and create.

Working my way up, I was terrified to tell anyone I had autism. I have completed 1½ degrees, certification courses (many) and am an IT manager. I am still 99% hands-on with Web development, design and multimedia, and no one would ever know I was autistic.

I learned communication skills as I went and still tend to be hesitant with the social aspect, but I am very friendly and know how to work with clients.

I have been in this field about 16 years and learn from books (with examples and exercises) and by doing. I often find it amazing how the thought process of an autistic connects things and information.

Is it a plus? Well, I think so except when I hit something I just do not like. Then my ability to learn on the go ceases and it is as if I hit a brick wall.

I have found that I excel with working with people, managing and anything that is creative, but managing or creating pure data is not something I can do.

■ **Submitted by:** *Anonymous*

IT is a funny business. We spend a large amount of time "talking" to inanimate objects, and are expected to "understand" them at a level the average user cannot begin to comprehend. Sure, they are just machines, but it seems that IT specialists, unlike mechanics or others who deal with machines, tend to be a *lot* more introverted and just plain odd. For non-IT managers, this becomes a challenge because they want the IT staff "involved" and "social," and many just are not.

As old, non-IT managers are replaced by IT-trained managers, I think the recognition of the skills and deficiencies will be better handled than they are today.

■ **Submitted by:** *Anonymous*

Somebody quit because he was told to reconnect some porn freak to the Internet, which was against company policy? That's not any kind of autism, that's just having a good moral compass and acting on it.

■ **Submitted by:** *Anonymous*

RESPONSE TO:

Vendor Disk Failure Rates: Myth or Metric?

April 4, 2008

"Some say the only reason the measurement hasn't been ditched yet is that there's no good alternative. 'Should we throw out MTBF? Well, what are we going to replace it with?' " — quoting former EMC Corp. employee Steve Smith

Simple — replace mean time between failures with the warranty period. If the disk manufacturers truly believe their drives are more reliable, then let them put their money where their mouth is and offer better/longer warranties.

Where I work, it's getting to the point that the warranty period defines the refresh cycle. The three-year warranty expires on a laptop? Time to get a new one.

Our experience matches that quote in the article. Three years is about when hard-drive failures start to spike.

Of course, longer warranties don't automatically denote quality. But overall, warranty period is probably a simpler and more accurate measure of reliability than the current pie-in-the-sky MTBF numbers.

■ **Submitted by:** *KirkW*

JOIN THE CHATTER! *You, too, can comment directly on our stories, at* **computerworld.com**.

COMPUTERWORLD

P.O. Box 9171, 1 Speen Street
Framingham, MA 01701
(508) 879-0700
Computerworld.com

■ EDITORIAL

Editorial Director Don Tennant
Editor in Chief Scot Finnie
Executive Editors Mitch Betts, Julia King (events)
Managing Editors Michele Lee DeFilippo (production), Sharon Machlis (online), Ken Mingis (news)
Design Director Stephanie Faucher
Features Editors Kathleen Melymuka, Valerie Potter, Ellen Fanning (special reports), Barbara Krasnoff (reviews)
Senior Editor Johanna Ambrosio (channels)
Senior News Editor Craig Stedman
News Editors Mike Bucken, Marian Prokop
National Correspondents Gary Anthes, Thomas Hoffman, Julia King, Robert L. Mitchell
Reporters Brian Fonseca, Sharon Gaudin, Matt Hamblen, Heather Havenstein, Gregg Keizer, Eric Lai, Linda Rosencrance, Patrick Thibodeau, Jaikumar Vijayan, Todd R. Weiss
E-mail Newsletters Editor David Ramel
Channel Editors Johanna Ambrosio (servers and data centers), Angela Gunn (security), Lucas Mearian (storage), David Ramel (networking and Internet)
Assistant Managing Editor Bob Rawson (production)
Blogs and Projects Editor Joyce Carpenter
Editor at Large Mark Hall
Senior News Columnist Frank Hayes
Art Director April O'Connor
Associate Art Director Owen Edwards
Research Manager Mari Keefe
Senior Copy Editors Eugene Demaitre, Monica Sambataro
Copy Editor Donna Sussman
Associate Editor, Community Ken Gagné
Office Manager Linda Gorgone
Contributing Editors Jamie Eckle, Preston Gralla, David Haskin

■ CONTACTS

Phone numbers, e-mail addresses and reporters' beats are available online at *Computerworld.com* (see Contacts link at the bottom of the home page).
Letters to the Editor Send to letters@computerworld.com. Include an address and phone number for immediate verification. Letters will be edited for brevity and clarity.
24-hour news tip hot line (508) 620-7716
Subscriptions and back issues (888) 559-7327, cw@omeda.com
Reprints/permissions The YGS Group, (800) 290-5460, ext. 150, computerworld@theygsgroup.com

News Digest

FIND THE FULL STORIES AT
COMPUTERWORLD.COM

THE WEEK AHEAD

TUESDAY: The Web 2.0 Expo San Francisco 2008 opens, with Sun CEO Jonathan Schwartz among the speakers.

TUESDAY: Carnegie Mellon and the Fisher IT Center at the University of California, Berkeley, hold a one-day conference in Santa Clara, Calif., on "the mobile future."

THURSDAY: Microsoft expects to report its latest financial results. Also due to file earnings reports this week are Yahoo on Tuesday, and Apple and EMC on Wednesday.

OPEN SOURCE

Sun to Reserve Some MySQL Features for Paying Customers Only

IT WAS an eventful week for Sun Microsystems Inc. at the annual MySQL user conference, the first since Sun acquired open-source database vendor MySQL AB in February.

First, Sun said it was pushing back the release of a MySQL 5.1 upgrade until the end of June — about three months later than planned — in order to fix some remaining bugs in the software.

Then the MySQL blogosphere erupted after Sun officials said during meetings at the user conference that some upcoming online backup features would be made available only to paying customers running MySQL Enterprise.

In numerous online posts, Marten Mickos, former CEO of MySQL and now senior vice president of Sun's database group, defended the plan not to release what he described as "high-end add-ons" to users of the free MySQL Community edition.

The move is part of an effort to ensure "that there is a viable revenue-generating business around MySQL," Mickos wrote. He said that the plan predated Sun's purchase and that other open-source database vendors have taken similar steps.

The core online backup capabilities being developed for a MySQL 6.0 release will be made available to all users, Mickos said. The add-ons that Sun plans to reserve for MySQL Enterprise users include data compression, encryption and driver technologies, although Mickos said that the source code for the add-ons may be released under an open-source license.

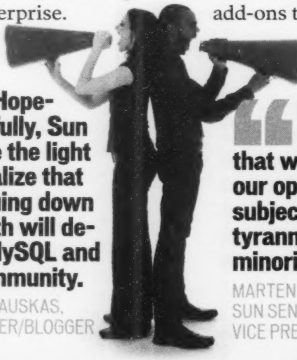
Don MacAskill, CEO of SmugMug Inc., an online photo-sharing service that is a paying MySQL customer, said in his blog that the new strategy could help keep users like him satisfied -- and thus benefit the overall MySQL community.

"Let's not forget that MySQL is a business," he wrote. "They have customers, and they have to solve those customers' problems." Doing so should result in "a virtuous cycle where the community benefits directly as MySQL thrives financially," MacAskill added.

But Jeremy Cole, a former MySQL database administrator at Yahoo Inc. who is now a consultant at Proven Scaling LLC, said that because MySQL Enterprise has a much smaller user base than the Community edition does, the backup add-ons will be tested by "only a few" customers.

In effect, Cole wrote in a blog post, Sun will be giving its paying MySQL customers "real, true, untested code" under the new plan.

— Eric Lai, with IDG News Service's James Niccolai



"Hopefully, Sun will see the light and realize that continuing down this path will destroy MySQL and the community.

PAUL SADAUSKAS,
MYSQL USER/BLOGGER

"We must make sure that we don't let our operations be subjected to the tyranny of a vocal minority.

MARTEN MICKOS,
SUN SENIOR
VICE PRESIDENT

LEGISLATION

N.Y. Set to Tax Amazon Purchases

The New York State Assembly this month approved a bill that would require certain online retailers, including Amazon.com Inc., to collect state sales taxes. State officials estimate that the new law will generate some $50 million in tax revenue this year.

The proposed law, which still must be signed by Gov. David Paterson, will require that Internet companies with a physical presence in the state collect state taxes from New York customers. Paterson must sign the bill by April 23.

In 1992, the U.S. Supreme Court ruled that only companies with a physical presence in a state had to collect sales taxes from residents of that state. However, New York contends that the ruling doesn't protect Amazon and other online retailers working with affiliates that have a physical presence in New York.

Amazon officials did not respond to requests for comment on the New York tax plan.

– LINDA ROSENCRANCE

I WORK IN A MIXED-IT ENVIRONMENT. NOW MY OPERATING SYSTEMS CAN TOO.

INTEROP ABILITY

DOWNLOAD THE COLLABORATION ROADMAP

It's the ability to have Microsoft® Windows Server® and SUSE® Linux Enterprise Server from Novell® work together. And the ability to run both with more confidence. It's Microsoft and Novell working together to reduce costs and complexity with new solutions for virtualization, directory integration, systems management, and office document translators—each with clearly defined intellectual property rights. So you can take compromise out of the data center and put simplicity and efficiency in.

Download the collaboration roadmap at **www.moreinterop.com**

Novell® Microsoft®

Copyright © 2008 Novell, Inc. and Microsoft Corporation. All Rights Reserved. Novell, the Novell logo and SUSE are registered trademarks of Novell, Inc. in the United States and other countries. Linux is a registered trademark of Linus Torvalds. Microsoft and Windows Server are trademarks of the Microsoft group of companies.

SECURITY

Cybercrooks Lure CEOs With Fake Subpoenas

PANOS Anastassiadis didn't click on a link in the fake subpoena that popped into his e-mail in-box last Monday morning. But then, he runs an IT security company.

Other high-level executives weren't so savvy.

Security researchers estimate that more than 2,000 people fell victim to the scam, in which CEOs and other senior executives received e-mails purportedly containing subpoenas to testify in federal court. If they clicked on a link to download more information, they instead received malware that gave attackers remote control of their PCs.

The so-called spear-phishing attack — which began on Monday and then flared up again on Wednesday — tailored information to individual recipients in an effort to make the come-on more believable.

For example, the e-mail sent to Anastassiadis, who is CEO of Cyveillance Inc., included his name, the company's name and its phone number within the fake subpoena, said James Brooks, director of product management at the security vendor.

The messages directed the intended victims to a Web site with a URL that ended with "uscourts.com." By Monday afternoon, the administrative office of the federal court system felt compelled to post an alert on its Web site (*www.uscourts.gov*) warning of the bogus subpoenas.

"This is probably one of the largest spear-phishing attacks we've seen to date in terms of number of victims," said Matt Richard, a director at VeriSign Inc.'s iDefense division.

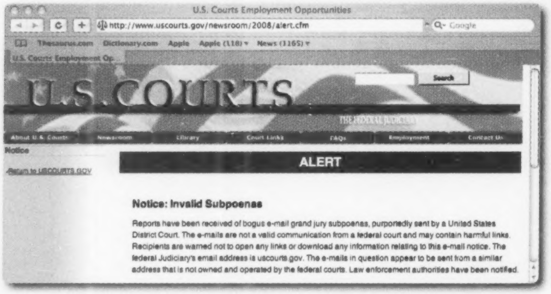
According to security researchers, the Web server that delivered the malware was based in China, while the computer that took control of the victims' PCs was in Singapore.

"The malware itself is not particularly interesting, [but] it was clever that it went straight to CEOs and didn't really blast the whole world," said John Bambenek, a security researcher at the University of Illinois at Urbana-Champaign.

And the ruse was effective, Bambenek said. "When people see that they've been subpoenaed," he noted, "they panic."

— Robert McMillan, IDG News Service

The federal court system posted an alert last Monday warning of the bogus subpoenas.



Notice: Invalid Subpoenas

Reports have been received of bogus e-mail grand jury subpoenas, purportedly sent by a United States District Court. The e-mails are not a valid communication from a federal court and may contain harmful links. Recipients are warned not to open any links or download any information relating to this e-mail notice. The federal Judiciary's email address is uscourts.gov. The e-mails in question appear to be sent from a similar address that is not owned and operated by the federal courts. Law enforcement authorities have been notified.

Short Takes

Oracle Corp. said that it plans to expand its lawsuit against **SAP AG** to include charges that workers at SAP's **TomorrowNow** subsidiary stole Oracle software applications with the knowledge of SAP executives. SAP had previously admitted to possible "inappropriate downloads" from Oracle's Web site.

AT&T Inc. plans to lay off about 4,650 employees, or about 1.5% of its workforce, to streamline its operations. The company said the move will affect mostly management personnel.

Online retailer **Bigreds.com Inc.** has filed a $1 million federal lawsuit against **Yahoo Inc.**, alleging that the Internet firm overcharged it by nearly that amount through click fraud.

Advanced Micro Devices Inc. reported a loss of $358 million in its first quarter, marking its sixth consecutive quarterly loss. The company blamed its lackluster performance on poor sales across all segments of its business.

SaaS

Salesforce.com Embeds Google Apps in CRM Tool

SALESFORCE.COM INC. last week announced that Google Inc.'s hosted applications software suite has been added to its CRM service.

The Salesforce for Google Apps service embeds four Google Apps tools in Salesforce.com's hosted CRM offering.

The combined product should help Google Apps gain entry into large companies, said Sheryl Kingstone, an analyst at Yankee Group Research Inc. However, she added, in order for the suite to be taken seriously by corporate IT managers, it still needs better word processing, presentation and spreadsheet tools.

The Schumacher Group is evaluating the combined product, which it hopes can improve productivity and workflow, said CIO Douglas Menefee.

The Lafayette, La., provider of medical staffing for emergency rooms uses Salesforce.com to manage its relationship with more than 2,000 independent contractors, said Menefee.

He noted that Schumacher won't use Google Apps to store or transmit patient data until it determines that the hosted offering meets HIPAA security requirements.

The new service is currently available at no charge. A second version, Salesforce for Google Apps Supported, will be available this summer for $10 per user per month.

– BRIAN FONSECA, AND THE IDG NEWS SERVICE'S CHRIS KANARACUS

Salesforce for Google Apps

- Salesforce CRM
- Google Gmail
- Google Docs
- Google Talk
- Google Calendar

Eliminate Costly Service Calls

Reboot Locked Devices Remotely with Tripp Lite Enterprise-Level PDUs

STATUS
LINK
CONFIG
ENVIROSENSE
Network Interface
20
LOAD (AMPS)
Digital Load Meter
30
Config Port
Output Breaker Bank 1
Output Breaker Bank 2

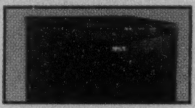
Tripp Lite Enterprise-Level Switched PDUs:

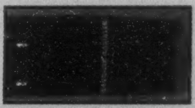
- Let you remotely monitor and control individual outlets via SNMP, Web or Telnet through their built-in network interface
- Safeguard against in-rush of current by allowing managers to start up devices in a predetermined sequence
- Extend runtime by allowing managers to shut down nonessential devices during a power failure
- Are perfect for servers, data centers, VoIP/telecom systems, Internetworking equipment and more

Premium features include:

- Digital load meter that shows total amperage draw and prevents overloads
- Space-saving 1U or 2U rackmount and 0U vertical rackmount options
- All-metal housings with versatile mounting options
- Assortment of high- or low-voltage outlets
- Automatic Transfer Switching (on select models) to provide backup source of AC power if one source fails

Tripp Lite also offers a wide range of affordable solutions to protect, control and secure network systems.


3-Phase UPS Systems


Hot-Swappable UPS Systems

KVM Switches

Rack Enclosures

Need help choosing a PDU?
Download our FREE white paper at:
www.tripplite.com/pduwhitepaper

85 YEARS Since 1922 Manufacturing Excellence

ISO 9001 Certified Quality Systems

TRIPP·LITE

Tripp Lite World Headquarters • 1111. W. 35th Street, Chicago, IL 60609 • 773.869.1234 • www.tripplite.com

WIRELESS TECHNOLOGIES

Retailer Looks to RFID to Boost Sales

American Apparel
Noho

PHOTO COURTESY OF AMERICAN APPAREL

AMERICAN APPAREL Inc. is turning to radio frequency identification technology in an effort to help shoppers find what they want in its stores.

The Los Angeles-based retailer last week disclosed that it has wrapped up a pilot test in a Manhattan store in which RFID tags were attached to every item on the shelves and in storerooms. It plans to expand the program to 16 more stores — 15 in New York and one in Santa Monica, Calif. — by early June.

Zander Livingston, a research and development strategist at the company, said the RFID effort is designed to ensure that shelves are always fully stocked, which would boost sales by 15% to 25%. The pilot store's shelves remained 99% stocked during the test, compared with an average of 85% at other stores.

Livingston said the tags are installed on each piece of clothing manufactured at the company's Los Angeles facility and will be scanned by readers installed in store stockrooms and on sales floors. When an item leaves the sales floor — whether it has been sold, misplaced or stolen — its departure will be disclosed on storeroom workstations, so workers can quickly restock it.

Pete Poorman, an analyst at ABI Research Inc., said American Apparel's large-scale rollout "is a positive indicator for the RFID industry."

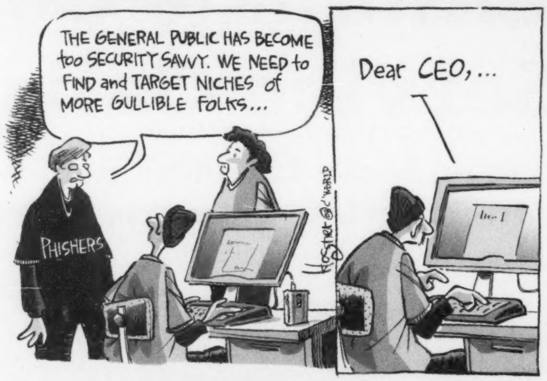
Livingston said the pilot effort cost $50,000 to $60,000, and he expects a full return on that investment within six months.

American Apparel has 187 stores worldwide. Livingston said the company will decide whether to roll out RFID systems to every store after it has evaluated how well the technology works in the New York and Santa Monica stores.

— Sharon Gaudin

BETWEEN THE LINES

By John Klossner


THE GENERAL PUBLIC HAS BECOME too SECURITY SAVVY. WE NEED to FIND and TARGET NICHES of MORE GULLIBLE FOLKS...
PHISHERS
Dear CEO,...
Klossner ©C'WORLD

BENCHMARKS LAST WEEK

Market research firm IDC reported that first-quarter PC shipments in the U.S. grew just 3.5% year over year – half of the growth rate it had predicted.

The PCI Security Standards Council issued a set of data security controls that vendors of payment applications will be required to build into their products.

30 YEARS AGO: A U.S. appeals court ruled that AT&T Corp. had to connect MCI Communications Corp.'s Execunet service to its Bell System network, leading to the start of competition in the long-distance market.

Global Dispatches

Microsoft, HCL Sign Development Pact

NOIDA, India – Microsoft Corp. this month signed an agreement with outsourcer HCL Infosystems Ltd. to jointly develop frameworks for deploying Microsoft products at companies in India.

Microsoft Chief Operating Officer Kevin Turner made the announcement during a visit to India on April 11.

The agreement calls for HCL, which is based here, to set up a team of 500 developers who will work on frameworks for vertical industries such as telecommunications, banking, financial services, energy, defense, retail, media and entertainment.

Microsoft and HCL also announced a three-year agreement to train and certify 50,000 Indian students on Microsoft technologies at 100 training centers set up by HCL.

John Ribeiro,
IDG News Service

Australia Mulls Two Data Breach Plans

SYDNEY – Australian Privacy Commissioner Karen Curtis last week released a draft of her agency's Voluntary Information Security Breach Notification Guide so businesses can review it.

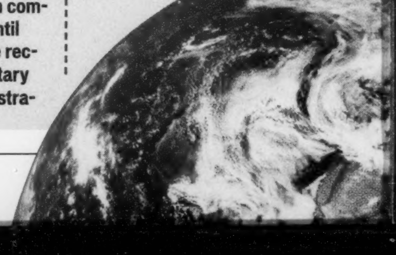
The 41-page document is based on voluntary guidelines developed by the privacy commissioners of Canada and New Zealand. Businesses can comment on the draft plan until June 16, Curtis said. The recommendations for voluntary actions comes as the Australian Law Reform Commission reviews a separate proposal to legally require Australian businesses to publicize information about security breaches.

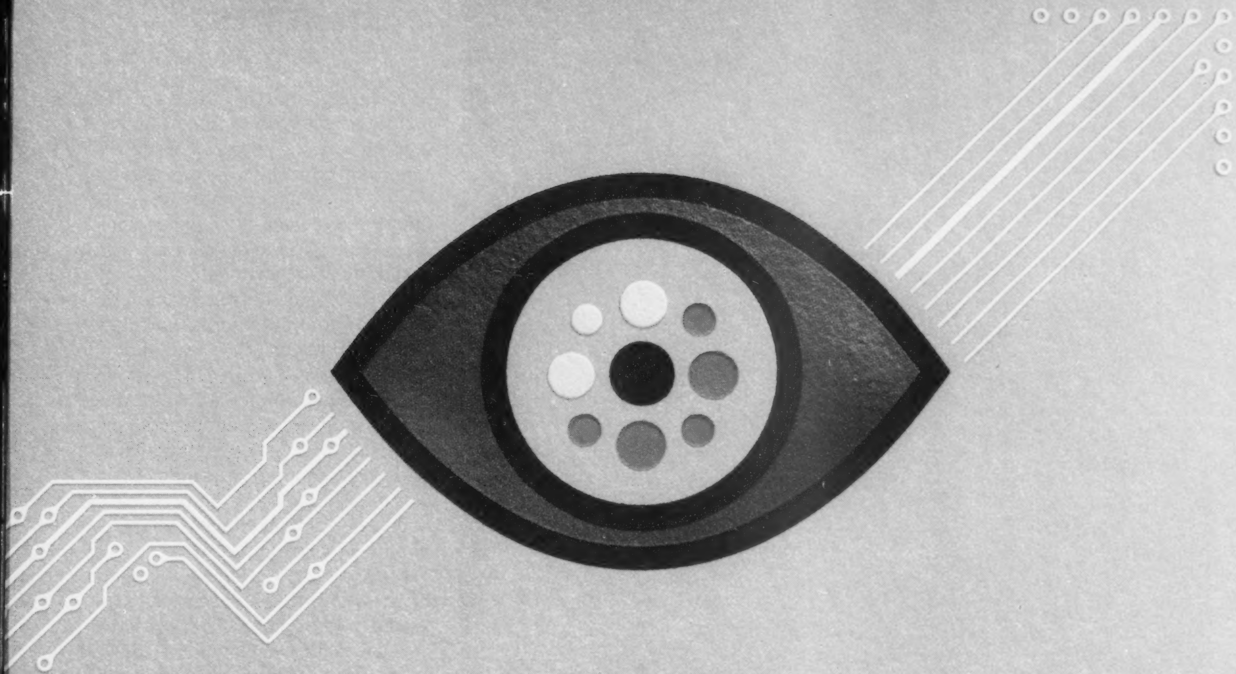
Sandra Rossi,
Computerworld Australia

BRIEFLY NOTED

Matthew Swindells has resigned as CIO of the U.K.'s troubled health IT program, Connecting for Health, to join London-based consulting firm Tribal Group PLC. Swindells will be managing director of a new health division at Tribal. He had just replaced Richard Granger as CIO of Connecting for Health on Jan. 31.

Mark Chillingworth,
Computerworld U.K.





ALTERNATIVE THINKING ABOUT SERVICE MANAGEMENT:

Business Driven. Not Just Business Aligned.

Alternative thinking is repositioning IT from the server closet to the front lines, embracing its impact on the business (not just in a PowerPoint® deck, but actually doing it).

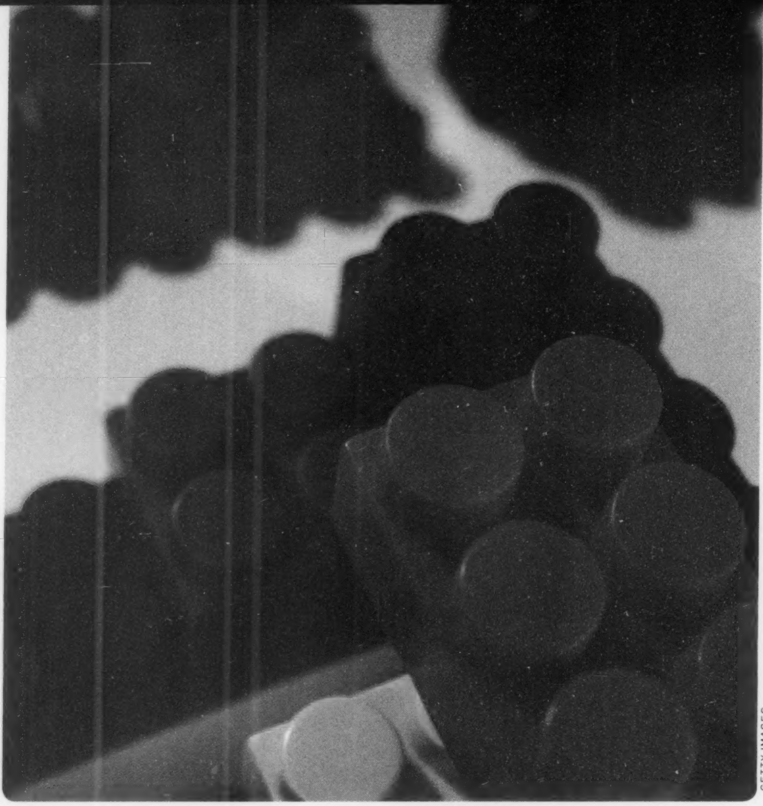
It's rewiring the rules of engagement to identify problems, prioritize solutions and automate change (before things become business critical).

It's partnering with HP, a pioneering force behind ITIL, to leverage the experience of certified consultants and utilize the ingenuity engrained in the DNA of our software.

It's placing business metrics under the microscope every day, every minute, every nanosecond—enhancing insight and extending control (from a financial perspective, for a change).

Technology for better business outcomes. hp.com/go/servicemanagement

©2008 Hewlett-Packard Development Company, L.P. PowerPoint is either a registered trademark or trademark of Microsoft Corporation in the United States and/or other countries.



GETTY IMAGES

Building-Block Data Centers May Reshape IT

Container-based systems and other modular data center technologies might help drive a shift to online 'compute clouds.' But that could leave the futures of some IT workers in a fog.

By Patrick Thibodeau and Eric Lai

A MAJOR TRANSFORMATION in the way that large data centers are built is under way, and the expected changes may have as much impact on IT productivity as the adoption of shipping containers did on operations in the freight industry starting in the late 1950s.

At that time, the shift from putting cargo on individual pallets to packing goods into much larger containers enabled shippers to load and unload vessels exponentially faster, with less labor. Now a similar transition is taking place in some data centers, via the use of container-based systems and other modular technologies.

Advocates say that replacing conventional racks of servers with systems built into shipping containers that can be rolled right into buildings will make it easier to set up data centers and add more processing power as needed. It also could pave the way for expanding the use of "compute clouds" to deliver online IT services — a development that might result in big changes within corporate IT departments.

Microsoft Corp. is one of the trailblazers of the containerized IT movement. In a suburb of Chicago, the software vendor is building a $500 million, 500,000-square-foot data center that will hold up to 220 shipping containers. Each will arrive preconfigured with racks containing as many as 2,000 servers, along with networking and power-distribution equipment to facilitate the setup process.

Michael Manos, Microsoft's senior director of data center services, said the Lego-like approach being used at the new facility in Northlake, Ill., will help shake up a part of IT that's in need of some change. "Data centers are typically very conservative," Manos said. "If you look at a data center built a year ago and one built 10 years ago, they look very similar."

Consulting firm Gartner Inc. says that building-block designs such as the one Microsoft is implementing will lead to the "industrialization" of IT within megasize data centers. According to Gartner, such facilities will be able to provide the technical infrastructure needed to support compute clouds that can scale on demand as the use of Internet-based application services grows. In fact, Microsoft plans to use the Northlake facility to help meet the processing demands that its Windows Live and Office Live online services are expected to generate.

Online services can also be much less expensive for companies. For instance, Gartner analyst David Smith estimates that it costs about $10 per month to provide e-mail services to an employee via internal systems. But doing so through an online cloud may cost only $5 per month. "The economics are very compelling," Smith said at Gartner's Symposium/ITxpo 2008 event in Las Vegas earlier this month.

But by accelerating the adoption of utility-style computing, container-based systems could lead to a thinning

Continued on page 16

DO YOU NEED A BETTER WAY TO SECURE YOUR DATA?

ENCRYPT YOUR DATA WITH THE NEW LTO ULTRIUM GENERATION 4 TECHNOLOGY.

LTO ULTRIUM 4 TECHNOLOGY CAN PROVIDE TAPE DRIVE LEVEL ENCRYPTION TO HELP PROTECT YOUR SENSITIVE INFORMATION. AND, WITH TAPE CARTRIDGE CAPACITIES UP TO 1.6 TB* AND TAPE DRIVE SPEEDS UP TO 240MB* PER SECOND, LTO-4 TECHNOLOGY CAN HELP YOU REDUCE STORAGE COSTS WHILE ADDRESSING DATA SECURITY.

ULTRIUM LTO 4

The Ultimate Tape Format.

HELPING TO REDUCE STORAGE COSTS AND PROTECT DATA!

For more information about LTO Ultrium 4 Technology visit: www.trustlto.com

*ASSUMES 2:1 COMPRESSED DATA. LINEAR TAPE-OPEN, THE LTO LOGO, ULTRIUM, AND THE ULTRIUM LOGO ARE TRADEMARKS OF HP, IBM AND QUANTUM IN THE US AND OTHER COUNTRIES.

Continued from page 14

of the IT worker ranks in corporate data centers — just as the advent of shipping containers reduced the need for longshoremen in ports 50 years ago. Online services "lessen your need for internal IT," said Adam Cohen, a Web architect for the municipal government of North Las Vegas.

Even the number of technicians needed to support modular systems may be less than what is required in conventional data centers.

The Microsoft facility will sprawl across about 12 acres of floor space and may have as many as 440,000 servers in the 220 containers that are being installed. And that's just on the first floor; an undisclosed number of additional systems will be installed on the second floor, which will have a traditional raised-floor layout.

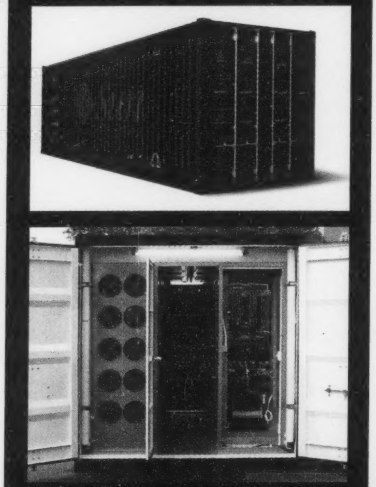
But with just 35 full-time employees divided among the equivalent of four work shifts at the 24/7 facility, the average number of on-site staffers likely won't break double digits. "Working at a Microsoft data center can be a lonely experience," Manos said. Microsoft has similar workforces at some of its other data centers, but Manos noted that those are much smaller than the Northlake facility will be, in terms of both systems and floor space.

The impact of massive data centers like the one Microsoft is building, and the added online services that they may make possible, won't be felt quickly within IT departments. "People don't change their e-mail systems overnight," Gartner's Smith said.

Jim Bingham, CIO at the University of Kansas Medical Center, agreed that any such changes will take time within his organization. But Bingham does plan to consider external online services. "Not immediately, but definitely in the next three to five years," he said.

Vendors such as Sun Microsystems Inc., Rackable Systems Inc. and Verari Systems Inc. are selling container-based systems (see box). IBM and Hewlett-Packard Co. have also developed modular data center technologies. But the appeal of cloud-based services may be limited in industries such as aerospace, defense and financial services, which all have to contend with numerous regulatory restrictions.

Inside the Box



Modular Datacenter S20 (Sun Microsystems)

SIZE: 20 by 8 by 8.5 ft.

WEIGHT: 18,000 lb. (without servers) to 34,000 lb.

SYSTEM CAPACITY: 280 server slots in seven racks, plus 40 more slots for networking and management devices

INTERNAL OPERATING TEMPERATURES: 50-95 degrees Fahrenheit

Ice Cube Modular Data Center (Rackable Systems)

SIZE: Available in 20- or 40-ft. lengths; 8 ft. wide

SYSTEM CAPACITY: Supports up to 1,400 servers in 28 racks

Forest Container Solution (Verari Systems)

SIZE: 40 by 8 by 9.5 ft.

SYSTEM CAPACITY: Supports 1,400 servers or 11.5 petabytes of storage

And companies that have already installed integrated systems extensively may not see a great need to shift their server resources to outside providers.

John Enck, another Gartner analyst, said that containers — whether they're the 20-footers that Sun is marketing, or the 40-foot-long ones that Rackable and Verari are offering — may make sense only for companies building data centers on the same scale as Microsoft. In other words, very few. "It's about as leading-edge as you can get — and it's not for the masses," Enck said.

Customized, special-purpose servers — such as the ones Dell Inc. began offering last year to customers that buy more than 1,000 systems per quarter — may be a less-extravagant alternative. Dell tunes all the systems in advance to support the specific applications that will run on them. One of the early users is search engine vendor Ask.com, which says the custom-designed systems have reduced its hardware costs and the amount of power its servers consume.

That kind of approach could provide data center managers with some of the modularity and efficiencies that Microsoft is aiming for in its Northlake facility, but on a more modest scale.

And even if more companies do embrace cloud-based online services in the years ahead, some users think that new opportunities will continue to open up within data centers.

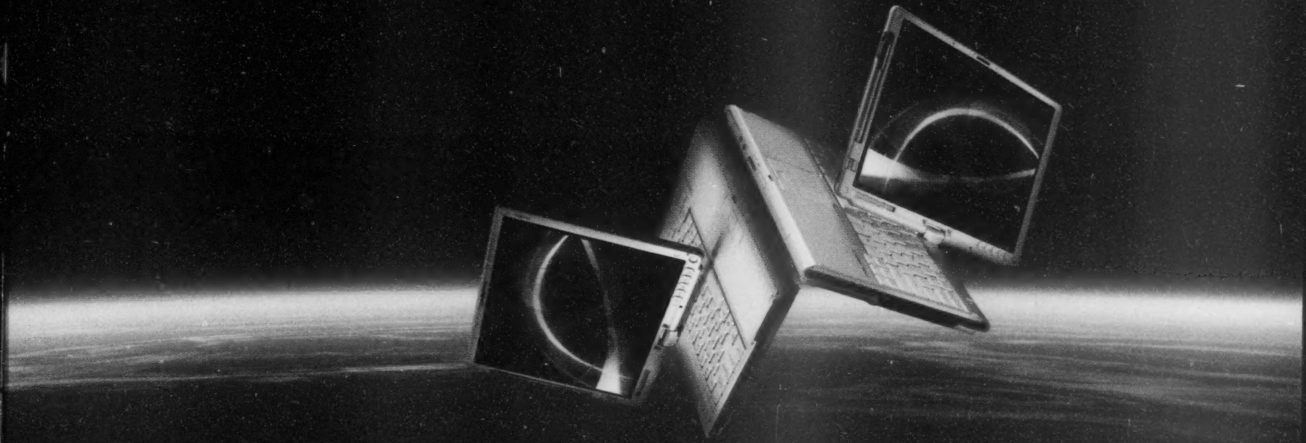
After all, there is still a need for a significant number of longshoremen in U.S. ports. In fact, as trade between the U.S. and countries in Asia has increased, so has the demand for dockworkers, according to Craig Merrilees, a spokesman for the International Longshore and Warehouse Union, which represents about 25,000 longshoremen on the West Coast.

ILWU members worked 24 million hours in 2001, Merrilees said. But by last year, that figure had risen to just under 33 million hours.

Similarly, workers will still be needed to deal with online service providers, said Jason Dauwen, a software development manager at a company that makes software for financial services firms. "But it will probably be more business [analysts] than technical staff," said Dauwen, who asked that his employer not be identified.

DigitalChalk Inc., a vendor of online training systems, relies on Google Apps for its internal e-mail. And last year, it began using Amazon.com Inc.'s Elastic Compute Cloud service to support customer applications. But no IT staffers lost their jobs as a result of that move, said Troy Trolle, DigitalChalk's chief technical officer. Instead, they began managing the company's applications on the Amazon EC2 servers. ■

Fujitsu recommends Windows Vista® Business for business computing.
Fujitsu recommends Windows Vista® Home Premium for personal computing.



Taking Tablet PC reliability to the ends of the earth. And beyond.

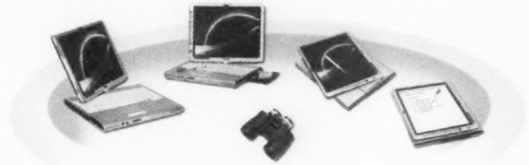
The LifeBook® T4200 Tablet PC takes reliability and convertibility farther than ever before.

The Fujitsu LifeBook T4200 Tablet PC with Intel® Centrino® Duo Mobile Technology proves just how far Fujitsu will go to deliver the most reliable products. It's manufactured in-house so we can maintain the highest quality standards. The Fujitsu LifeBook T4200 Tablet PC also features the industry's first bi-directional LCD hinge and a brilliant, 12.1" XGA display with wide viewing angles, so it's impressive any way you look at it. And whether you use its keyboard or powerful inking capabilities and pen-driven navigation, you get the best of both worlds. Go to **us.fujitsu.com/computers/reliability** for more information.

SUPERIOR CONNECTIVITY *Wi-Fi, Gigabit Ethernet, modem and optional Bluetooth 2.0*

BUILT-IN MODULAR BAY *add a weight-saver, media drive or 2nd battery*

DUAL-FUNCTIONALITY
it's a notebook and a Tablet PC



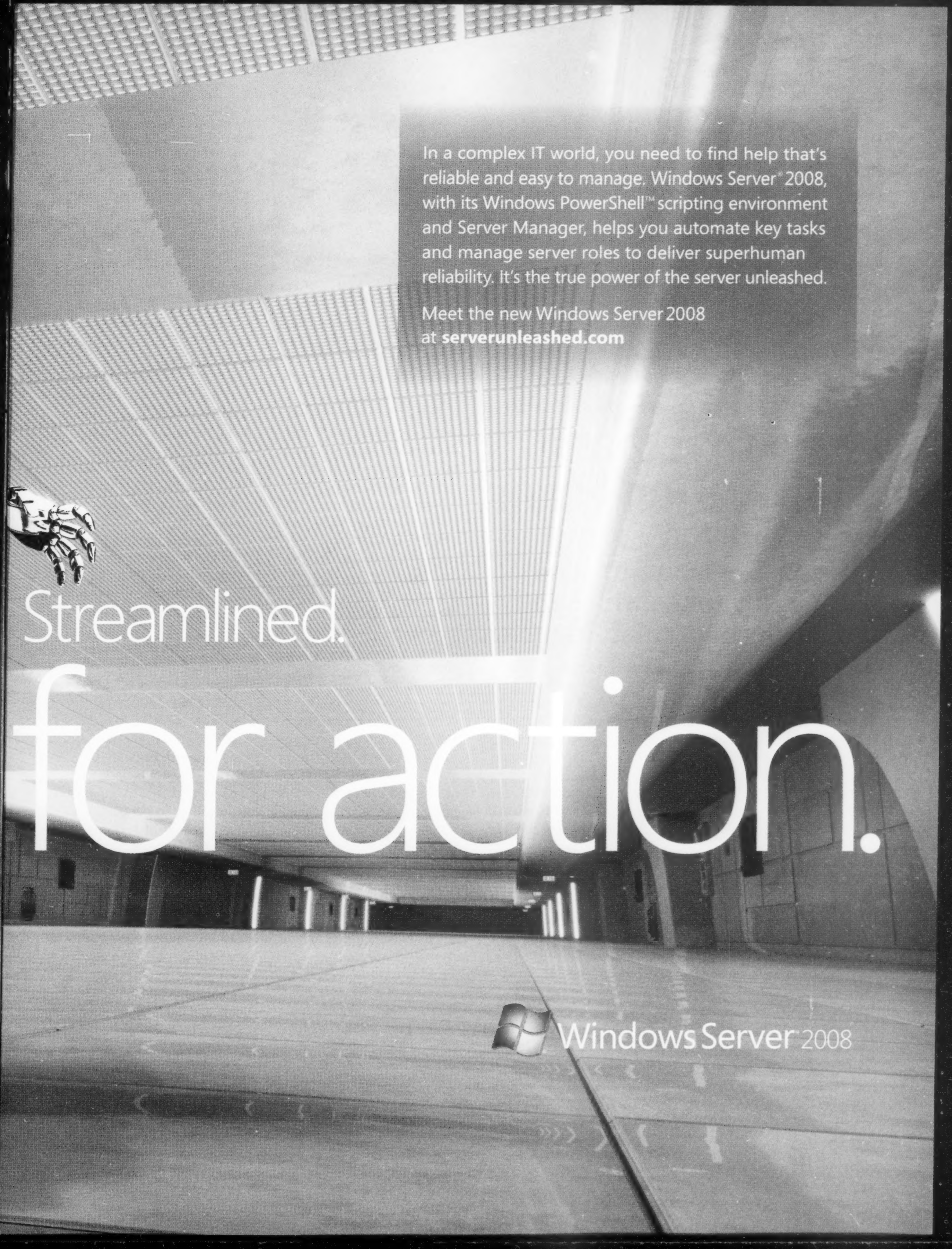
intel
Centrino
inside™
Core™ 2 Duo
inside™

FUJITSU

THE POSSIBILITIES ARE INFINITE

© 2008 Fujitsu Computer Systems Corporation. All rights reserved. Fujitsu, the Fujitsu logo and LifeBook are registered trademarks of Fujitsu Limited. Centrino, Centrino Logo, Intel, Intel Logo, Intel Inside and Intel Inside Logo are trademarks or registered trademarks of Intel Corporation or its subsidiaries in the United States and other countries. Microsoft and Windows are registered trademarks of Microsoft Corporation. All other trademarks are the property of their respective owners.

Microsoft
IT 24-7
Updated. Automated.
Ready



In a complex IT world, you need to find help that's reliable and easy to manage. Windows Server® 2008, with its Windows PowerShell™ scripting environment and Server Manager, helps you automate key tasks and manage server roles to deliver superhuman reliability. It's the true power of the server unleashed.

Meet the new Windows Server 2008
at **serverunleashed.com**

Streamlined.
for action.
Windows Server 2008

MARIO TAMA/GETTY IMAGES

« Corps of Cadets guards keep watch next to a ceremonial candle marking the one-year anniversary of the shootings at Virginia Tech.

Va. Tech Exposes Need to Expand Notification Plans

A year later, colleges are seeking new ways to send emergency text, e-mail and phone alerts. **By Matt Hamblen**

MANY U.S. colleges have moved quickly to expand mass emergency communications systems since the deadly shooting of 32 people by a gunman at Virginia Tech a year ago last week.

The killing spree last April 16 underscored the need for multiple emergency notification channels on college campuses, where students often must shut down wireless devices while in class and sometimes go hours or even days without checking e-mail.

"Relying on any one form of communication would not be wise," noted Mark Owczarski, a spokesman for Virginia Polytechnic Institute and State University, as Virginia Tech is officially known.

Corrine Hoch, an IT manager at Columbia University in New York and president-elect of The Association for Communications Technology Professionals in Higher Education, said the tragedy unleashed a yearlong "flurry of activity" among U.S. colleges and universities to re-evaluate emergency communications needs.

"After Virginia Tech, colleges everywhere reprioritized the way they communicate emergencies," said Gary Margolis, chief of police at the University of Vermont.

Two months ago, UVM activated a hosted emergency notification service from San Diego-based MIR3 Inc. The system, which costs the school about $35,000 per year, is used to schedule and send out emergency messages to the Burlington, Vt., university's 13,000 faculty, staff and students, Margolis said.

The system also allows administrators to send continuous notices in over multiple channels, such as text messaging, land line phones, e-mail and cell phones, until a response is received.

MIR3 officials said that sales of the service mushroomed after the Virginia Tech shootings, increasing from a handful of academic customers to more than 150 colleges and universities, each of which spends an average of $30,000 annually for the hosted product.

Prior to the shootings, Virginia Tech operated several emergency notification systems, including outdoor sirens and systems that sent voice mail and e-mail messages to phones and computers across the campus of 29,000-plus students.

Virginia Tech had been evaluating systems that could "meet the diverse needs of an increasingly mobile community" — and provide redundancy, Owczarski said. He noted that it takes some 30 minutes to send text messages to students and staffers, but an e-mail blast can reach the school's 36,000 addresses in three minutes.

Last July, just three months after the shootings, the school launched VT Alerts, a hosted service that sends out emergency text alerts, instant messages, e-mail or phone calls to as many as three devices selected by the subscriber, Owczarski said.

The VT Alerts system, which uses hosted products from National Notification Network LLC in Glendale, Calif., has not yet been used in an emergency situation, but it has performed well in three tests, Owczarski noted. So far, about 20,000 students and staffers have subscribed to the service, he added.

VT Alerts is expected to cost the university about $200,000 over three years, Owczarski said.

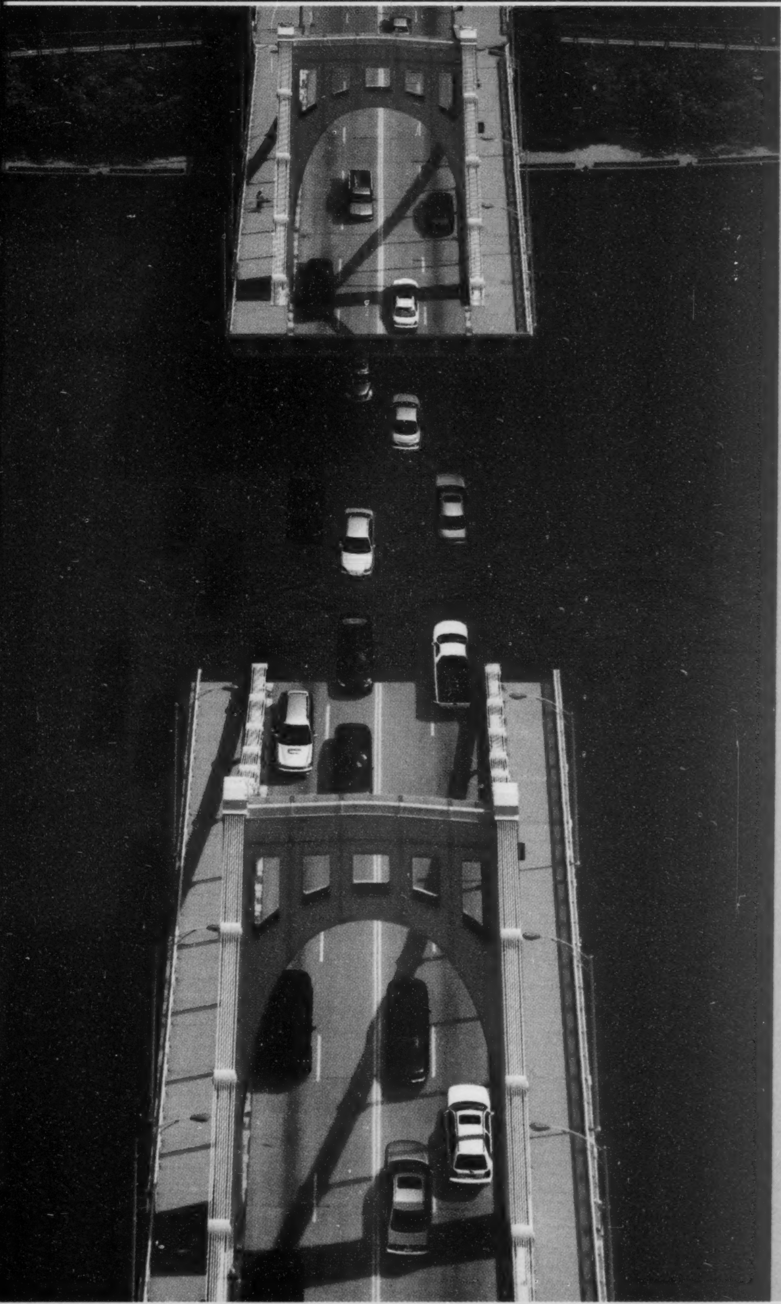
To upgrade, college administrators must have realistic expectations for automated emergency communications systems, and they must create policies outlining who can send messages and how to avoid confusion during an emergency.

"Your systems have to be timely, accurate and useful," Margolis said. "It can't be used for anything other than an emergency. [It cannot be used to] say that hockey tickets just went on sale."

In addition, Margolis noted that good technology cannot replace good judgment and solid emergency planning. "Technology never solves everything, and it isn't always an easy fix. Any good CIO will say, 'Don't expect this technology to solve everything,' " he said.

Added Owczarski: "You also can't underestimate the oldest form of emergency communications: word of mouth." ■

WHEN INFORMATION AVAILABILITY MATTERS



SunGard. Setting new standards for Information Availability by delivering a range of solutions that meet your specific availability objectives. Flexible enterprise wide solutions from IT management to AdvancedRecovery℠. 2,500 experts. Three decades of experience. 100% successful recovery track record.

To see how SunGard can help improve your IT availability stop by www.availability.sungard.com or call 800-871-5857 today.

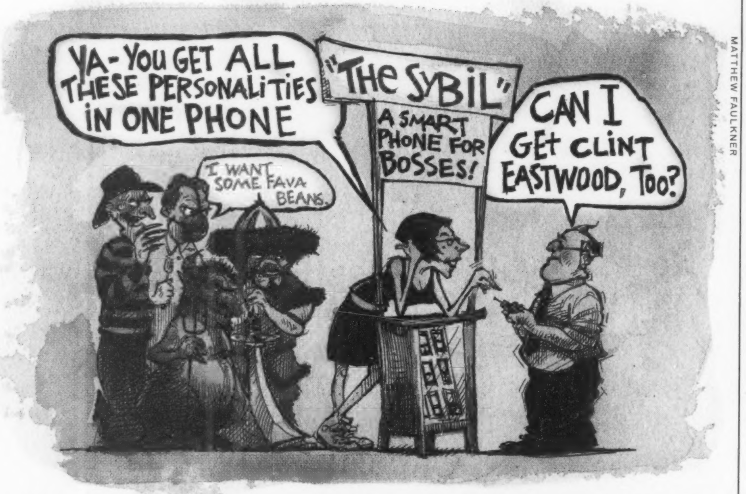
SUNGARD®
Availability Services
Keeping People and Information *Connected.*

680 East Swedesford Road, Wayne PA 19087
800-468-7483 | www.availability.sungard.com

TO SEE THE TOP SEVEN ROADBLOCKS COMPANIES FACE IN ACHIEVING INFORMATION AVAILABILITY AND FIND OUT HOW TO AVOID THEM VISIT **WWW.AVAILABILITY.SUNGARD.COM/IA**.

On the Mark

HOT TRENDS ■ NEW PRODUCT NEWS ■ INDUSTRY BUZZ BY MARK HALL


YA-YOU GET ALL THESE PERSONALITIES IN ONE PHONE
"THE SYBIL" A SMART PHONE FOR BOSSES!
I WANT SOME FAVA BEANS.
CAN I GET CLINT EASTWOOD, TOO?

MATTHEW FAULKNER

Who Will Your Phone Be Today?

YOUR BASIC high-end cell phone comes packed with specialized processors to handle cell communications, the camera, the MP3 player, gaming and so forth. Handset engineers have the daunting task of balancing all those power requirements, costs and real estate demands.

Peter Richards and Mark Milligan argue that it's less daunting if a multicore CPU is combined with a virtualization layer. Milligan, vice president of marketing at VirtualLogix Inc. in Sunnyvale, Calif., says VirtualLogix VLX lets multiple operating systems and applications run in an embedded environment without the need for discrete chips. That means wireless operators can run their software in a secure container while opening up virtual machines to third-party providers. It's an ideal arrangement for companies that want to give users devices "with multiple personalities," says CEO Richards. He envisions policy-managed handsets that are enterprise tools by day and entertainment units at night.

113M

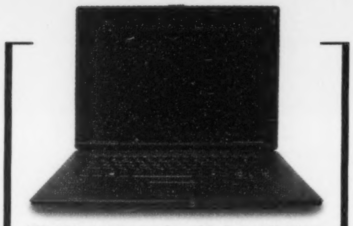
Smart phones shipped in 2007, estimates Sweden's Berg Insight AB.

Richards says NXP Semiconductor in Eindhoven, Netherlands, is almost ready to unveil the first multicore mobile CPU. But for now, we'll need to muddle through with devices limited to a single, all-too-often-crabby personality.

Will Thin Finally Be In?

IT has been stymied in deploying thin clients for many reasons, but they all come down to the fact that users haven't been able to work with thin clients the way they work with PCs. That's about to change.

Next month, Citrix Systems Inc. in Fort Lauderdale, Fla., will ship XenDesktop, which lets you create virtual machines for PC users. Sumit Dhawan, senior director of product marketing, claims that management is drop-dead simple: "All you have to do is pick Windows XP or Vista. That's it." Well, it's not quite that simple, but simple.



The Wyse Viance Pro M: A mobile thin client for the virtual desktop market.

When Citrix ships XenDesktop, hardware makers should be ready with a host of devices with fat-client-like performance and capabilities. Take Wyse Technology Inc.'s Viance Pro M laptop, which will ship on May 20 and starts at $599. It has the look and feel of a standard 15-in. laptop. According to Jeff McNaught, Wyse's chief marketing officer, the "appliance," as he calls it, powers up in 10 seconds or less (and shuts down equally fast), has no fan or disk drive (so it's utterly silent) and works with any approved USB device. It's got Bluetooth, which means BlackBerries and other devices can sync. It comes standard with Wi-Fi and 1Gbit/sec. Ethernet connectivity and has a slot for 3G wireless cards. As long as a user can get a signal, he can work.

Sounds like a win-win-win: Users get everything they want, IT gets better desktop management, and companies get vastly improved information security.

Monitor VM Apps

Application owners naturally press IT to allocate as many resources as possible for their apps in a virtual environment. But Scott Herold, lead architect at Quest Software Inc. in Aliso Viejo, Calif., suggests that you might want a tool that tells you when things are *too* good. According to Herold, Quest's Foglight 5.2 alerts IT when a given application is not using the resources it has been assigned, helping to limit virtual machine sprawl. The tool can also predict when you're in danger of running out of resources such as mass storage, he says, and it prevents you from doing things like assigning more memory than the physical server has installed.

Foglight 5.2 costs $1,000 per CPU socket. ■

COMPUTERWORLD.COM

MORE BUZZ
Discover and discuss more industry action at the On the Mark blog:
computerworld.com/blogs/hall

Advertisement

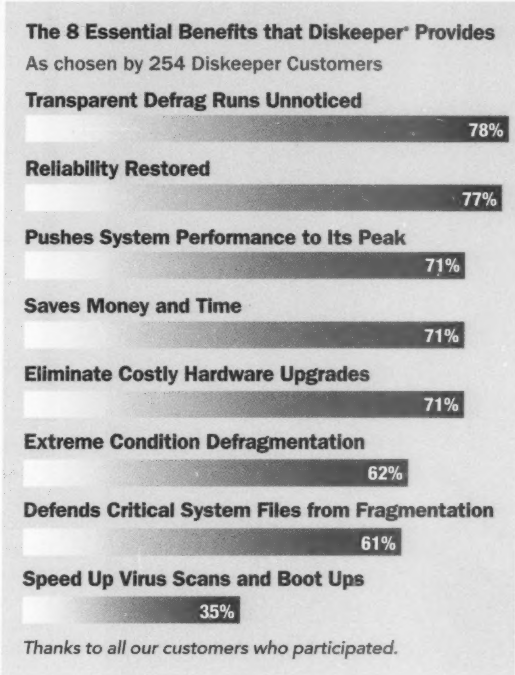
Speed up Your Systems in Real Time

The 8 Essential Benefits of Automatic Defragmentation

Fragmentation is unavoidable. It wreaks havoc on hard disks, causing crashes, hangs and complete system failures.

Diskeeper 2008 eliminates fragmentation—automatically. It's the real-time solution to your performance and reliability problems. Diskeeper is absolutely indispensable. It speeds up boot times, makes applications launch faster and improves the efficiency of backups and anti-virus scans. Diskeeper's benefits have proven time and time again to be a vital part of system administration.

We asked 254 of our customers what were the essential benefits of using Diskeeper. This is what they had to say:



1. PUSHES SYSTEM PERFORMANCE TO ITS PEAK

"We had one machine that had a failing drive in a RAID 5 array and when we replaced that drive, performance improved by 300%. And then when I ran Diskeeper for a week, again it improved over 300%. A disk intensive process that was taking 1.5 hours is now taking 15 minutes."

2. RELIABILITY RESTORED

"We use Microsoft® SQL Server®. We were receiving hundreds of messages per day in the log like this one: SQL Server has encountered 21 occurrence(s) of I/O requests taking longer than 15 seconds to complete on file [E:\mssql\data\...]

"We researched this error and found that it is usually caused by badly fragmented hard drives. While our drives are part of a large SAN solution, we were not totally convinced that this should be causing the problem. We downloaded a trial version of Diskeeper and after running it, all of these errors disappeared! We have purchased 5 copies of Diskeeper and we are installing them on all of our production databases with the expectation to never see this error again!"

3. TRANSPARENT DEFRAG RUNS UNNOTICED

"The server automatically defragments only when there are idle resources. No more worrying about when I can schedule defragmentation, no more worrying about if the defragmentation will cause performance issues. InvisiTasking™ has worked great for us on everything from file and print servers to SQL servers."

4. DEFENDS CRITICAL SYSTEM FILES FROM FRAGMENTATION

"I have been using Diskeeper at my office on the 63 workstations and 4 servers over the last year. The addition of Frag Shield™ 2.0 eliminates the task of manually changing the MFT. In the past most of my MFTs needed adjustment. Now that this function is automatic, I don't have to manually check it."

5. SAVES MONEY AND TIME

"Prior to installing Diskeeper, we were manually defragmenting. Some of the drives would take hours to defrag and within a few days we would need to defrag again. Installing Diskeeper basically paid for itself within a month by reducing off-hour salaries. Also the defragmented drives perform better and last longer. It's a no-brainer for production machines."

6. SPEED UP VIRUS SCANS AND BOOT UPS

"Diskeeper saves time in doing virus scans, backing up, indexing and searching the files. There are also faster download times for users because of the lower load on the defragmented RAID."

7. EXTREME CONDITION DEFRAGMENTATION

"One day our SQL Server came to a halt. I did everything: ran spyware software, deleted numerous .TMP files, ran Windows® update, etc. But nothing got the server to run. Then I installed and ran Diskeeper; I found that the hard drive was horribly fragmented. But after Diskeeper finished defragging the system, the server came up."

8. ELIMINATE COSTLY HARDWARE UPGRADES

"We were looking at having to replace or upgrade some of the servers because they were so slow. Since the Diskeeper install, they are performing well enough that we are no longer looking at the upgrades and replacements."

Diskeeper is essential for maximum speed and reliability on networked systems. Accelerate your systems' performance. Restore reliability. Try Diskeeper 2008 for free now!

SPECIAL OFFER

Try it FREE for 45 days!

with InvisiTasking™
Diskeeper® 2008
Maximizing Performance and Reliability—*Automatically*™

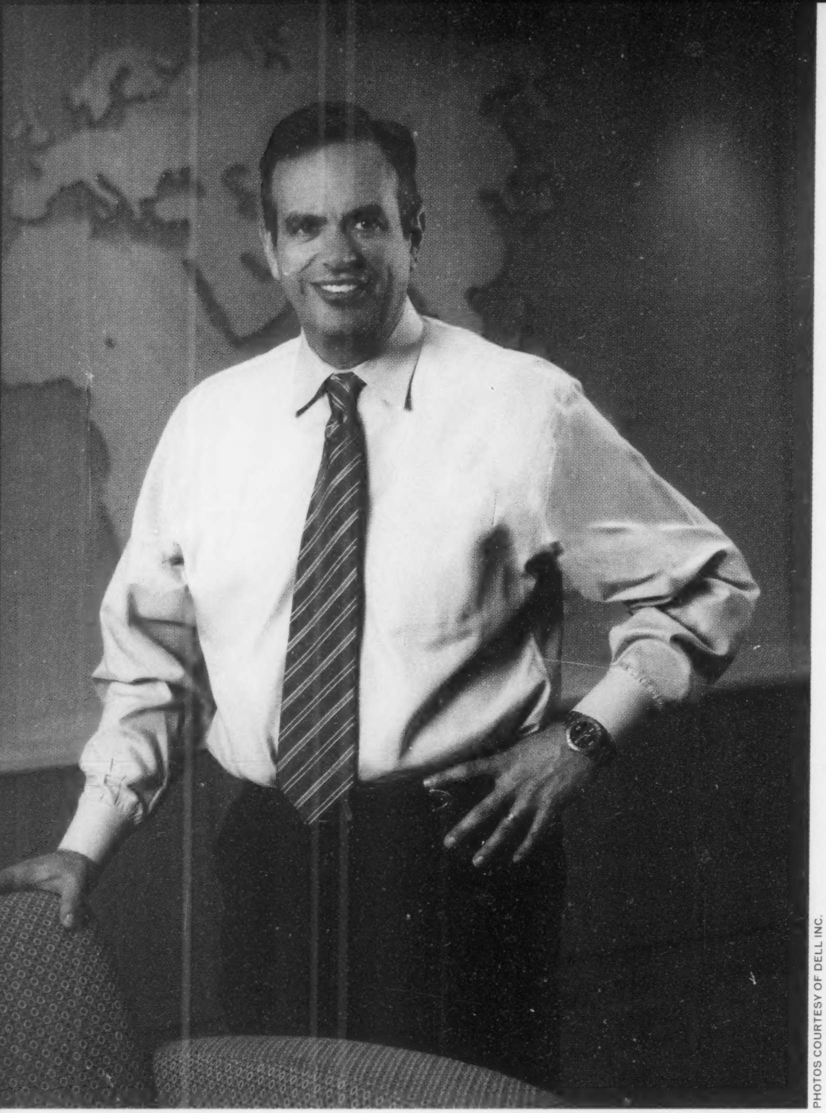
Go to **www.diskeeper.com/cwtrial**

(Note: Special 45-day trialware is only available at the above link)

Volume licensing and Government/Education discounts are available by calling 800-829-6468, extension 4058.

Diskeeper corporation

© 2008 Diskeeper Corporation. All Rights Reserved. Diskeeper, InvisiTasking, Frag Shield, Maximizing System Performance and Reliability—Automatically, and the Diskeeper Corporation logo are either registered trademarks or trademarks owned by Diskeeper Corporation in the United States and/or other countries. All other trademarks and brand names are the property of the respective owners. Diskeeper Corporation • 7590 N. Glenoaks Blvd. Burbank, CA 91504 • 800-829-6468 • **www.diskeeper.com**



PHOTOS COURTESY OF DELL INC.

Dossier

Name: Steve Schuckenbrock

Title: CIO and president of global services

Organization: Dell Inc.

Location: Round Rock, Texas

Favorite book of all time: *The Pillars of the Earth*, by Ken Follett

Favorite nonwork pastimes: Family and golf

Role model: "My dad. Great work ethic, very determined to accomplish whatever task is in front of him. I think work ethic is one of the most important and undervalued traits today."

THE GRILL

Steve Schuckenbrock

Dell's CIO talks about fighting to regain customer confidence, delivering IT as a service and targeting the global market.

Steve Schuckenbrock recently outlined Dell's plan to deliver a hosted remote management offering it's calling "IT as a service."

It's no secret that there are a lot of Dell users with horror stories, and there's obviously a reason why Web sites with names like IhateDell.net have sprung up. How do you respond to someone who says that under the circumstances, there's a certain irony in Dell positioning itself as a service provider, because Dell service is kind of a joke? Well, first, I don't agree with that. Second, the reason I don't is because if you look at those sites, they call out specific issues, most of which are consumer-driven issues, not commercial, business-driven issues. If you look at our commercial business, it's performing very, very well.

I understand that you want to focus on expanding the consumer and small-business markets. And that's where the biggest problem lies, correct? Let me give you a little bit of the history. A few years ago, the company made a decision to move a lot of the support services offshore. We did it way too quickly. We did not move process management disciplines with it as effectively as we should have, and we wound up making some mistakes with the services experience. We have, over the last couple of years, moved a lot of that service back onshore and brought real process discipline and tool discipline to both the consumer and commercial environments. The consumer suffered more, because more of that was actually moved incorrectly in the first place. And I think in both cases, you're seeing significant improvements.

So, what exactly do you want to deliver under your IT-as-a-service plan, and to whom? I'm really trying to focus in on small and medium business for now, and then configurable managed servic-

Continued on page 26

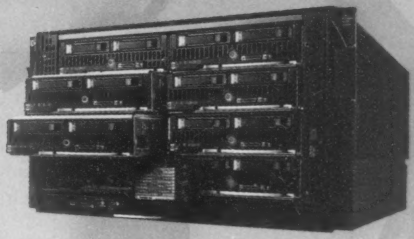
ALTERNATIVE THINKING ABOUT POWER AND COOLING:

Take the heat off.

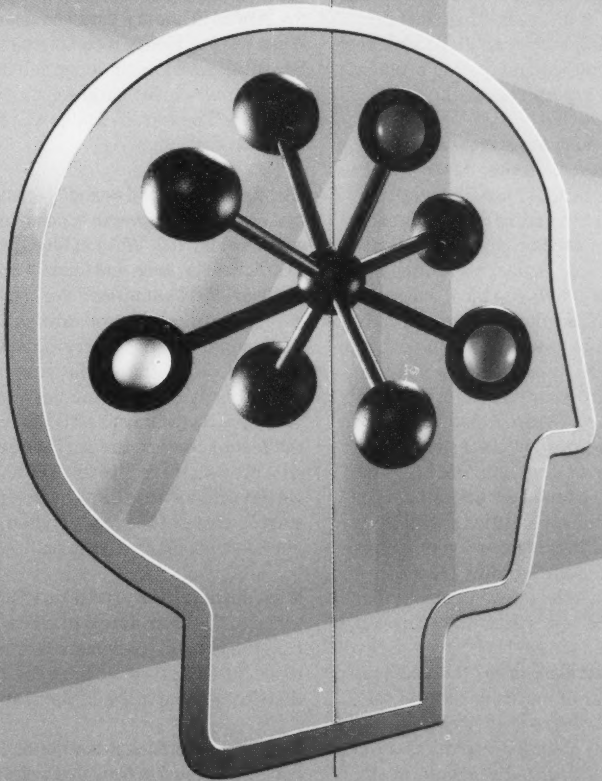
Take the heat off of your increasing power and cooling costs with the HP BladeSystem c3000. In addition to ProLiant Server Blades, you can add a variety of StorageWorks Storage Blades for a complete solution. The c3000 works almost anywhere by simply plugging directly into a standard power outlet—with no additional cooling requirements.

Technology that helps you avoid risk while helping to reduce costs. How cool is that?

Technology for better business outcomes.

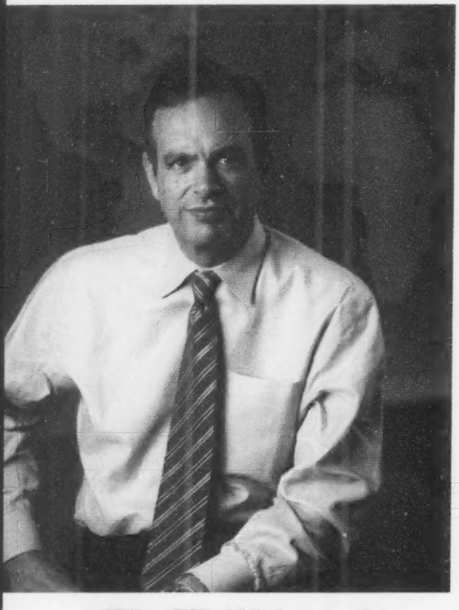


HP BladeSystem c3000
Featuring efficient
Quad-Core AMD Opteron™ processors.



To learn more, call 1-888-277-9618 or visit hp.com/go/success66

AMD, the AMD Arrow logo, AMD Opteron, and combinations thereof, are trademarks of Advanced Micro Devices, Inc. The information contained herein is subject to change without notice.
© 2008 Hewlett-Packard Development Company, L.P.



> **“We’re going to do for the supply chain of services the same thing that Dell did for the supply chain of hardware.**

Continued from page 24

es for large business. I want to deliver a range of [services] for customers that solve the specific issues around managing their infrastructure. And I want them to be able to configure and choose which of those services make the best sense for their business.

If you go back to the hardware company that Michael [Dell] started 23 years ago, he essentially got configurability, supply chain optimization, and price and cost value to customers, and we’re going to do the same thing in the services space. We’re going to do for the supply chain of services the same thing that Michael and Dell did for the supply chain of hardware.

Can you elaborate on where your acquisitions last year of Everdream and SilverBack Technologies fit into the plan? Everdream is a software-as-a-service platform specifically focused on IT systems management. It basically makes sure that assets and the services for those assets are in the state that they’re supposed to be in. And any difference between where they are and what they’re supposed to be experiencing gets resolved automatically through the delivery capabilities of Everdream.

Inside of that platform, we have integrated SilverBack, which does proactive monitoring of anything with an IP address. If it’s a case that can’t be solved remotely, we can dispatch somebody to come out and fix that problem before you experience a failure.

So you’re talking about remote management as a hosted service, right? Yes. The software is hosted by Dell, and the remote infrastructure management is provided by Dell or one of Dell’s partners. This is a service; it’s not the hardware itself. When you have drivers that are out of sync with the operating system, somebody will fix that for you. When you have patches that need to be applied to your software, somebody should be applying the patches for you, without you even necessarily having to know that’s going on. We host all of the software tools, we host all of the management capabilities associated with providing that service to you, and we do that from a remote location — wherever it’s the most effective labor strategy for your particular situation.

Where is that likely to be? It could be in any number of locations around the world — Cyberjaya [in Malaysia] and Guadalajara, Mexico, are the two that we’ve started with. But if you recall, Dell has 10,000 people who provide tech support to our commercial customers. So we can take that initial triage of your problem, solve it as best as we can without ever talking to you or having to involve you in that problem, and then transfer the ownership of that problem to somebody in your country that speaks in the dialect of your choice to be able to help you with the remaining issues that you have to be involved in.

Remote management tends to raise concerns about vendors mucking around inside users’ systems. What’s your response to a prospective customer who is apprehensive about opening its systems kimono to Dell? The [service] will be fully certified around [auditing standard] SAS 70 and SOX. We also intend to assure compliance around HIPAA and Basel. Clearly, security is an important element, and the Everdream platform and ITIL processes enable multiple layers of security.

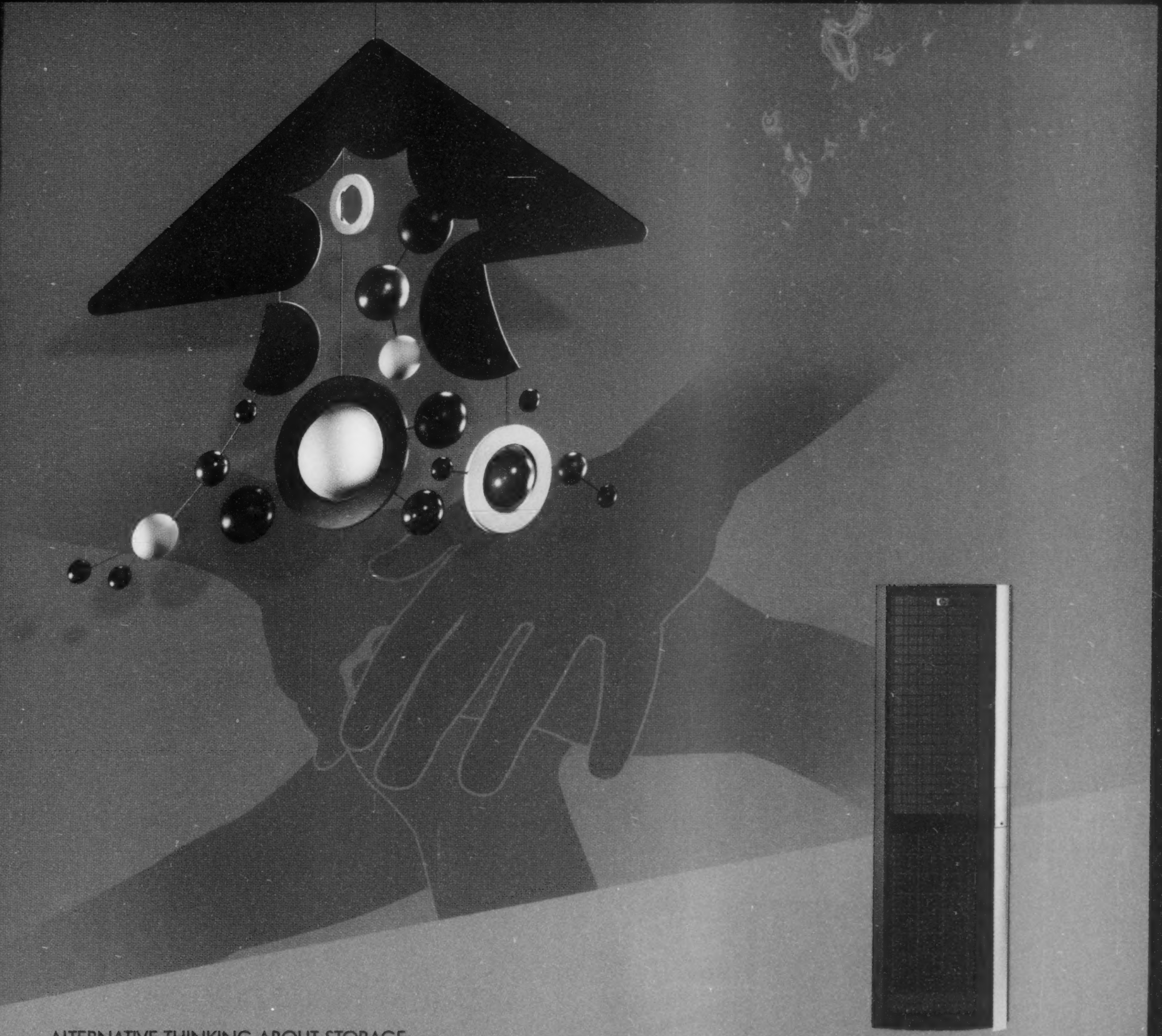
I understand you’re currently piloting the service in about a dozen companies. When will you launch it commercially? We think we’re going to launch it here in the Americas by summer, and we think we’ll be in Asia and in Europe by the end of the year.

Michael Dell has told financial analysts that most of your growth is going to be outside of the U.S. Will you focus on Brazil, Russia, India and China – the so-called BRIC countries? We see tremendous growth opportunities for the company in the emerging markets — the often-written-about next billion users. It’s the BRIC countries and beyond. It’s the Malaysias, the Vietnams, the rest of Eastern Europe. We see terrific growth there already. We think we got off to a little bit too late of a start in some of those areas, and we’ve got some ground to make up.

What obstacles are you facing? Getting the right infrastructure in place, getting the right management teams in place, making sure we have the right distribution partners on the team.

Does your reference to distribution partners mean you don’t see Dell’s direct model being effective in those markets? In some markets, it’s exceptionally effective; it’s very effective for western India, as an example. In other markets, it’s simply not enough. In fact, if you get out into the western regions of China, there aren’t enough computers for people to go online in order to be able to buy a computer. So having alternative distribution methods, like we’ve done in retail in the consumer space, is an incredibly important part of our growth strategy.

— *Interview by* **Don Tennant**



ALTERNATIVE THINKING ABOUT STORAGE:

UNIFY STORAGE.

Self-optimizing storage is more powerful and cost-effective. So the new HP StorageWorks 4400 Enterprise Virtual Array unifies viewing and access of up to 96TB of storage through data pooling and automatic capacity allocation, to dramatically simplify managing storage. Bringing storage together saves times and money. Technology for better business outcomes.

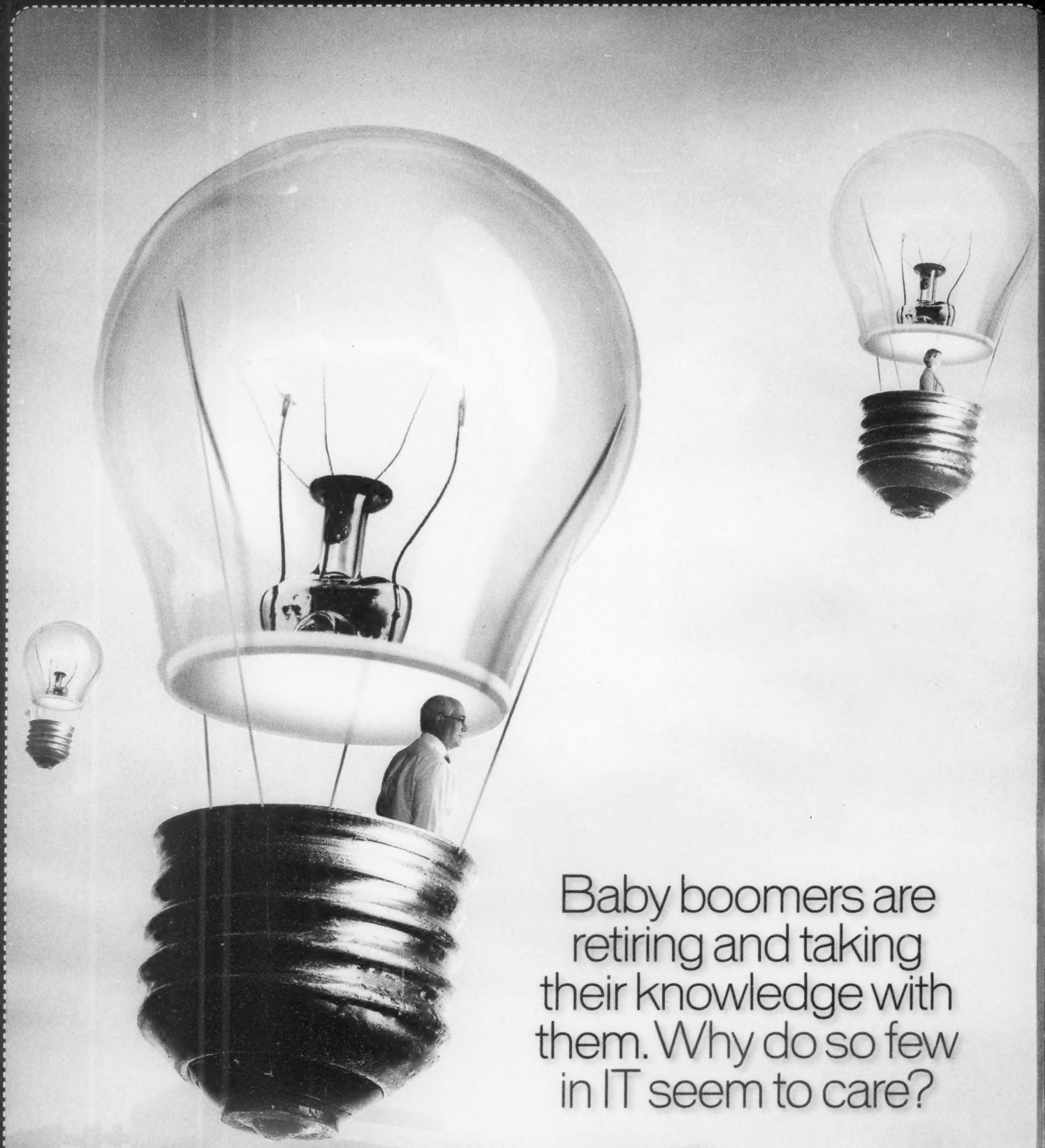
HP STORAGEWORKS EVA4400

Up to 96TB virtual storage capacity.

- Enterprise-class performance
- Over 30% better capacity utilization*
- Up to 75% less time needed to configure and manage*
- Easy application integration

Now's the time for virtual storage.
Visit hp.com/go/virtualstorage6

©2008 Hewlett-Packard Development Company, L.P. The information contained herein is subject to change without notice. *Source: Edison Group.



Baby boomers are retiring and taking their knowledge with them. Why do so few in IT seem to care?

WHAT BRAIN DRAIN?

BY MARY BRANDEL

YOU'D THINK the words "brain drain" would strike fear into the hearts of IT managers. Since the calendar has turned to 2008 — and the oldest baby boomers are now eligible to receive Social Security — it has become clear that growth in the number of older workers will soon surpass growth in the number of those just starting out. In eight years' time, one in four workers will be 55 or older, according to the U.S. Bureau of Labor Statistics. And particularly in IT, there's not a big influx of new talent. According to the Computing Research Association, computer science enrollments dropped 14% each year between 2004 and 2006.

Although IT organizations understand these workforce trends, few are taking significant measures to mitigate the risks that the loss of intellectual capital seems to portend. In a 2006 survey of 488 companies conducted by Buck Consultants LLC, only 42% of the respondents said the aging workforce was a significant issue, and 29% said it had little or no significance. And in a nationwide study of 550 human resources managers conducted by Monster.com last summer, only 12% of the respondents said they consider knowledge retention a high priority within their companies, even though one-third of them said they expect at least 20% of their workforce to retire in the next decade.

It seems that many businesses are content to watch their boomers walk out the door. And because few have taken the retirement issue seriously, companies that want to transfer knowledge from older to younger workers have few models to follow. As a result, those that are trying to get ahead of the retirement wave are finding themselves pretty much on their own.

One reason the impending boomer exodus seems to have so little resonance in IT is that, relatively speaking, there isn't a very large population of older IT workers, says Peter Cappelli, author of the upcoming book *Talent on Demand: Managing Talent in the Age of Uncertainty.* "It's mostly a young person's game," he says.

Statistics from the U.S. Bureau of Labor Statistics bear this out. In 2007, only 10% of the U.S. IT workforce was 55 years or older, compared with 17.6% across all occupations. Moreover, considering that the midpoint age of boomers is currently about 51, retirement is more than 10 years off for many.

There are other reasons for the lack of concern. One is that although the costs of losing key IT personnel to retirement can be high, they are also hidden, gradual and indefinite, says Dave DeLong, president of research firm David DeLong & Associates and author of *Lost Knowledge: Confronting the Threat of an Aging Workforce* (Oxford University Press, 2004).

"Nobody will go to the executive board and say, 'Last year we could manage this process more effectively, but Joe left, so now we can't,' " DeLong explains. "It's a loss of face, so they'd explain it in other terms."

In addition, he says, it's common for companies to let IT professionals retire, figuring retirees can be rehired as consultants without their pay showing up in the budget as a salary cost. Of course, this is something of a shell game, DeLong points out. Not only are companies spending "an incredible amount of money on rehiring retirees," he says, but they're also not transferring their knowledge. "They just throw them back in the job, so they're just prolonging the problem," he notes.

And finally, he adds, do you really want your business to depend on someone who can go play golf anytime he wants?

It's no wonder that Barbara Ring at the Chubb Group of Insurance Companies felt like a pioneer

▸▸▸

STEPHEN WEBSTER

when she recently embarked on a study of the Chubb IT organization's exposure in terms of employee retirements, in order to formulate a mitigation strategy.

Ring, senior vice president for IT HR, had reason for concern. The average tenure in IT at Chubb stands at 17 years — a lot of time to accumulate key knowledge and experience — and more retirements had begun to pop up. "We saw that over the next five to 10 years, this large influx of folks will be retirement-eligible, and the brain drain would negatively impact the company if we didn't have time for knowledge transfer, mentoring and other ways to maintain the intellectual property of the company," she says.

And with declining numbers of people entering IT, Ring adds, "we really need planning time to have the company not be at a disadvantage."

Ring is seeking not only to identify which Chubb IT professionals will soon be eligible for retirement, but also to determine their years of service, which technologies and applications they support, and how critical that knowledge is to the business. For instance, if half of the people supporting an arcane but mission-critical application are nearing retirement eligibility, "that's a risk to the company," Ring says.

She has had to build the process for doing all this from scratch. "We haven't found a lot of peer companies doing this type of work," she notes.

THE CULTURE CURE

Vinny Ferrari, CIO at Edward Jones, is studying IT's retirement landscape at the investment firm. But he's not too concerned about knowledge retention, because employees move around the organization throughout their careers, so no one exclusively owns key knowledge or a critical skill. "People bend over backwards to teach each other what they're working on," he says.

Moreover, many IT pros at the firm move into vendor relations work before retiring. "When they start to wind down their career, many choose to use their softer skills," he says.

That easy mobility and informal knowledge transfer enables IT folks to pass along knowledge before they retire, Ferrari says. "The severity of the [brain drain] problem really boils down to the culture of the organization."

– MARY BRANDEL

Chubb's approach eschews any broad-based program that would offer perks and incentives to anyone nearing retirement. Instead, the company is studying exactly where its biggest risks lie. Then it will take steps to address those risks.

That's the approach DeLong advocates. "Often, management doesn't know what knowledge is at risk," he says.

The age of an employee doesn't necessarily corollate with his value to the organization, DeLong points out. Some near-retirees may have been at a company for only a short time, for example. And moreover, he says, "frankly, there are some people who should retire. Their skills aren't up to date, or they don't have knowledge that's critical to the future of the business."

CAPTURING KNOWLEDGE

When the Tennessee Valley Authority realized that 30% to 40% of its workforce would retire over the next five years, it developed a process to determine which employees possessed unique, undocumented knowledge; to assess the risk of losing that knowledge; and to find ways to capture it through retention, documentation, mentoring, training and the sharing of expertise.

DeLong has studied the TVA, which is the nation's largest public utility. He says that the TVA performed a risk assessment for each position in the organization by ranking employees on a scale of 1 to 5 in terms of how soon they would retire and how critical their knowledge and skills were. Depending on the score, each position was prioritized based on the need to assess the endangered skills, develop a knowledge retention plan or even offer benefits that would encourage the worker to stay longer.

"One of the most important things is to start a conversation about what would keep key employees long enough to capture their knowledge," DeLong says. A powerful tool in that effort is to offer longtime staffers new challenges and even new roles. "You may lose them from that [current] role," he says, "but you're keeping them available to transfer knowledge about their job."

But where many IT groups trip up, DeLong contends, is in making knowledge transfer more about technology and less about communication. For example, the first approach to knowledge transfer might be to build a database to capture documentation and lessons learned, without thinking through how that information will be used by ensuing generations of employees. It's important to involve the younger employees in the knowledge capture and teach older workers how to mentor, DeLong explains. "It's not about giving career advice; it's about, 'Here are three steps to troubleshooting the system,' " he says.

AN AGING WORKFORCE

The percentage of U.S. workers 55 and older is rising . . .

2006	16.8%
2016	22.7%

. . . while likely successors will be on the wane in the next eight years.

Age 55-64	+30.3%*
Age 35-44	-5.5%*
Age 16-24	-1.1%*

*Projected percentage growth or decline, 2006-2016

SOURCE: U.S. BUREAU OF LABOR STATISTICS

Few IT managers have taken steps to retain professionals nearing retirement age.

Flex schedules	19%
Part-time options	12%
Contracting retired employees	9%
Increased compensation	9%
Bonuses for staying on	8%
Delayed retirement plans	4%
No steps taken	60%

Note: Multiple responses allowed.

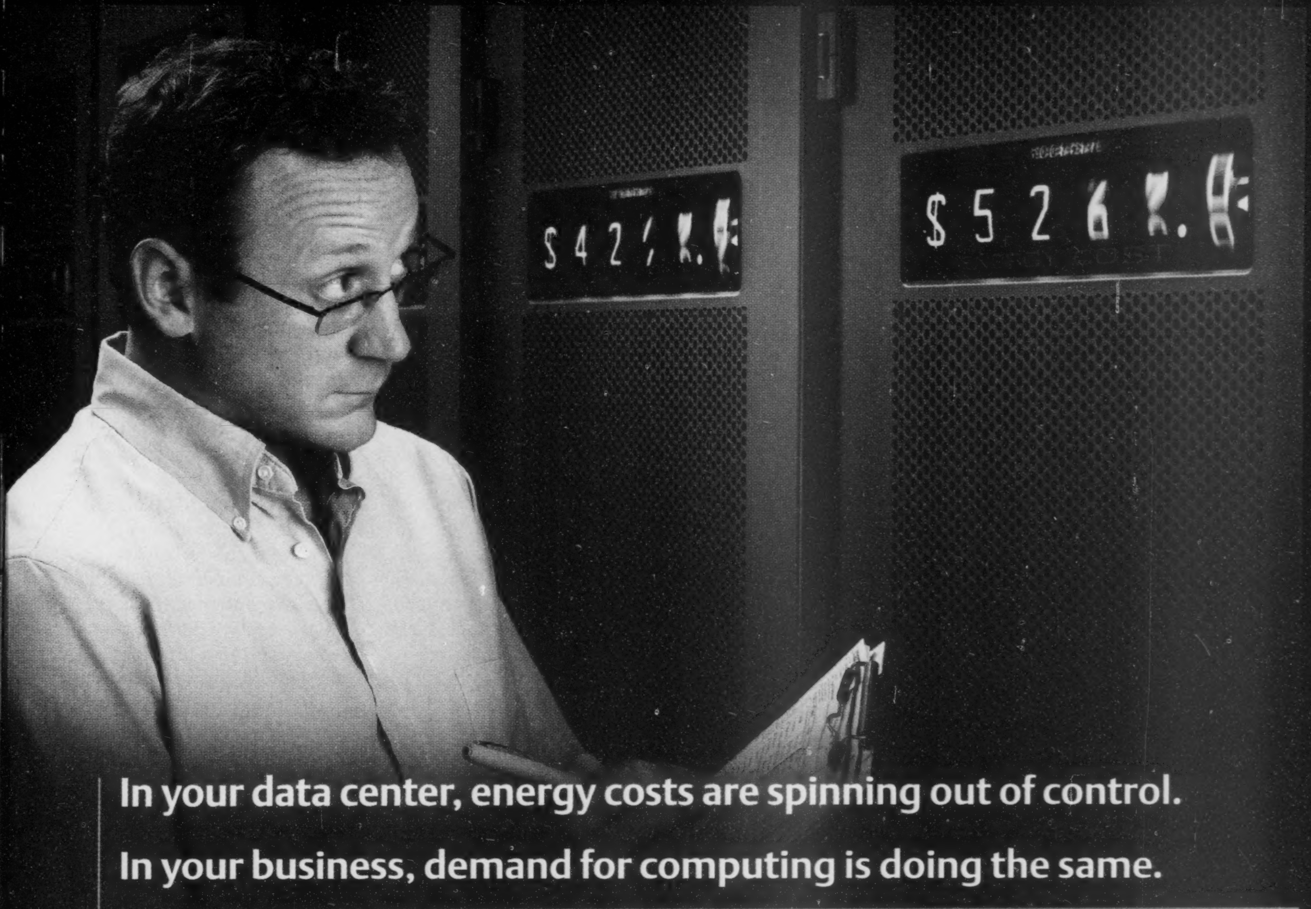
Source: *Computerworld* survey of 233 IT professionals, May-June 2007

It's also important to identify what's in it for the mentor, DeLong adds. For example, would a phased-retirement benefit or some other perk motivate older workers to make knowledge-sharing a priority?

All in all, no matter how many of a company's IT employees fall into older age brackets, it's clearly important to assess the value of the knowledge and skills that are walking out the door.

"It's not about being nice to old people," DeLong says. "It's about the future workforce capabilities of IT and the legacy knowledge that's critical for that. The problem is, we tend to overlook that." ■

Brandel *is a* Computerworld *contributing writer in Newton, Mass. Contact her at marybrandel@verizon.net.*



In your data center, energy costs are spinning out of control.

In your business, demand for computing is doing the same.

Spiraling IT energy consumption is increasing costs and limiting your ability to add new technology. Emerson Network Power and its Liebert power and cooling technologies can help you reverse the rise in energy consumption and remove constraints to growth.

One example is the **Liebert XD™**. This flexible, modular cooling system reduces cooling energy costs by 30% while enabling higher rack densities. Download our *Energy Logic* white paper to discover what increased efficiency can do for your business at **energy.liebert.com**.

Liebert energy efficiency
Just another reason why Emerson Network Power is the global leader in enabling Business-Critical Continuity™

EMERSON
Network Power

Emerson, Business-Critical Continuity and Liebert are trademarks of Emerson Electric Co. or one of its affiliated companies. ©2008 Emerson Electric Co.

EMERSON. CONSIDER IT SOLVED.™

GETTY IMAGES

Ethical Outsourcing

Adherents say it's good for your conscience and your company. **By Mary K. Pratt**

CIO RON KIFER wants to ensure that the outsourcing providers he hires are aligned with his own company's objectives. But Kifer uses more than the usual questions that examine whether the work can be delivered on time and on budget. He looks at social and ethical factors, too.

"We just got into IT outsourcing within the past couple of years, and we're trying to apply the same ideas: giving back to community, supporting the economies in which we live and work, green initiatives," says Kifer, who is a group vice president at Applied Materials Inc., a Santa Clara, Calif.-based company that creates and commercializes nanomanufacturing technology. "We need to make sure that our suppliers are operating to the same high standards" as the company, he says.

Kifer is ahead of what some see as the next wave in contract employment: socially responsible outsourcing.

The International Association of Outsourcing Professionals (IAOP) lists socially responsible outsourcing as the No. 1 trend in the field for 2008. The association predicts that companies providing, using or offering advice on outsourcing will increasingly develop standards that go beyond pure business objectives to address ethical questions. It expects that these standards will touch on topics that indicate how a company interacts with people, the community and the environment, such as labor policies and green initiatives.

This isn't just a feel-good move, however. Proponents say that outsourcing providers with socially responsible policies — as well as the IT shops that hire them — will find that corporate citizenship has business value, too. It can lower expenses, such as the cost of replacing burned-out employees, and provide better outcomes.

"Social responsibility is good business, besides being a good thing to do," Kifer says.

Concern about socially responsible outsourcing has been building for years, stemming in part from the fact that companies are adopting ethical standards for their own operations, says Jagdish Dalal, managing director of thought leadership at the IAOP in Poughkeepsie, N.Y.

"More people are looking at the ethics statements of the companies they do business with to make sure their statements are congruent," Dalal says.

There has been plenty of bad press over outsourcing and offshoring and the effects such practices have on employees and communities. Such coverage has raised concerns among companies that have seen the impact of their own corporate citizenship initiatives weakened by negative perceptions of their outsourcing partners, says IAOP Chairman Michael Corbett.

While critics have charged that workers employed by outsourcers — particularly those offshore — often earn unfairly low wages, Dalal says IT outsourcing providers certainly don't fit the stereotype of industrial sweatshops, with child workers and others laboring in unsafe conditions.

Still, Dalal says, "sweatshops exist anywhere there is unethical practice." In the IT realm, companies that expect workers to be on call constantly or to always put in extra hours without additional compensation could be downgraded in the eyes of prospective partners. And companies that hire such outsourcing providers could face negative public pressure, Dalal says.

The potential for bad PR isn't the only reason IT shops are beginning to look at this issue. Corbett says outsourcing has become a critical factor in the success of many IT departments, which heightens the need for proper management of it.

"It's not a new topic, but there's a new focus on it," Corbett says. "Businesses are increasingly looking at how the outsourcing decisions they make affect the communities they're working in."

Companies are still developing guidelines on this topic. "We're looking at general categories, making sure it's a safe environment, that there are no children in the workforce," Kifer says. "But I think eventually you'll see organizations drill down and come up with concrete and specific requirements."

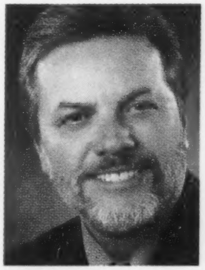
PRIORITIES INTRUDE

Already, IT departments are asking their outsourcing providers about recruitment and retention policies, compensation plans, employee training and benefits packages, says Stephanie Moore, an analyst at Forrester Research Inc. But Moore and others question whether the trend will go beyond those basics. She hasn't seen any contracts that ask about charitable giving or community-focused activities, for example.

Attorney Melise Blakeslee is even more skeptical. IT departments still focus on key business issues when evaluating outsourcing contracts, says Blakeslee, the leader of the tech transactions, Internet crimes and e-business groups at McDermott Will & Emery LLP and author of the upcoming book *Internet Crime, Fraud and Tortes* (Oxford University Press, March 2009).

IT managers want to know how outsourcing providers handle and safeguard their data, whether they can deliver on time, and how much they charge for their work, Blakeslee says.

The issues that fall under social responsibility aren't addressed in the contracts, and so far aren't discussed, she says. Although some companies do ask about a provider's diversity initiatives — it's common corporate policy to ask such questions with all business partners, Blakeslee says — even that issue carries little weight.



“We need to make sure that our suppliers are operating to the same high standards.

RON KIFER, CIO, APPLIED MATERIALS INC.

"I have never seen it determine anything," she says.

"Cost is king," Moore adds. "Cost comes first, flexibility of terms comes second, and maybe then, if you're stumped, you look at [social responsibility]."

But Corbett and Dalal maintain that examining a provider's social policies has business value. For example, they point out that ethical labor practices, such as offering training and benefits, translate into better employee retention and improved engagement.

"Few would do it if it didn't produce a financial return, and it's becoming a competitive advantage," Kifer says. He cites environmental policies as an example, noting that reducing a data center's cooling requirements can save serious cash in this era of escalating energy costs.

GOOD RESPONSE

One indication that the trend toward socially responsible outsourcing is real is that outsourcing providers are responding to it.

Dariusz Sus, head of global business process outsourcing product development at Capgemini, a global outsourcing provider, says clients are asking about his company's compensation plans, diversity initiatives and work schedules. He says clients want to ensure that Capgemini treats employees fairly so it can attract and retain qualified workers.

"Our clients are concerned about social responsibility because they treat our people as an extension of their own [workforce]," he says.

And though companies haven't been as inquisitive about Capgemini's green policies and corporate citizenship initiatives, Sus says those questions "may come sooner [rather] than later."

He remembers one client asking about Capgemini's community initiatives because the client had plans to eventually expand overseas and wanted to be seen as a good corporate citizen.

Sus says he believes client companies will start looking more closely at these areas when selecting providers.

Some already do.

"All things being equal," Kifer says, "we will select an organization that has a plan and demonstrates [a determination] to use a level of social responsibility that's consistent with our goals and objectives." ■

Pratt *is a* Computerworld *contributing writer in Waltham, Mass. Contact her at marykpratt@verizon.net.*

What to Ask

AN OUTSOURCING provider's record on social and labor practices often speaks to its ability to deliver products, says Christine V. Bullen, a senior lecturer at Stevens Institute of Technology in Hoboken, N.J., and president of the Global Sourcing Council, a nonprofit professional organization. If a company keeps workers in windowless rooms without access to the outside to prevent data leaks, for example, it will likely experience high turnover.

Here are some questions that Bullen and others suggest asking to evaluate an outsourcing provider's record on social policies:

- **What percentage of the local workforce do you employ?**
- **What are the laws in your area regarding the minimum age of employment?**
- **What is the minimum age of workers you will employ?**
- **What salary and benefits do you provide?**
- **Does your compensation plan meet your workers' needs, and how have you reached that conclusion?**
- **Tell me about workers' schedules: How many hours do they work in a week? How many days a week do they work? How many hours per shift? What are the starting and ending times?**
- **What career paths are open to your employees?**
- **Do you work with government or other stakeholders in the community to advance community development?**
- **Do you provide education or training for community members outside your actual workforce?**
- **How do you balance security needs and your employees' working conditions?**
- **What green techniques are you using?**
- **How are you reducing your carbon footprint?**
- **Does your company have any environmental initiatives?**

– MARY K. PRATT

IBM, the IBM logo, WebSphere and Take Back Control are trademarks or registered trademarks of International Business Machines Corporation in the United States and/or other countries. ©2007 IBM Corporation. All rights reserved.

_INFRASTRUCTURE LOG

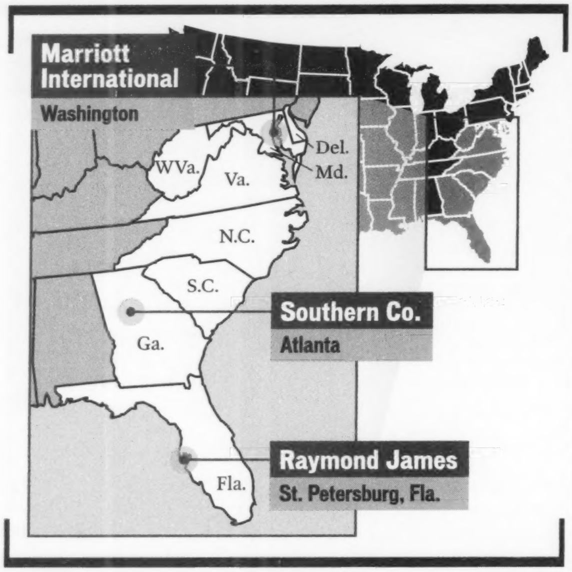
_DAY 79: This is out of control! Our IT environment is rigid and inflexible. Our business needs are changing, but our environment isn't built to change with them. We can't adapt. Oh, no...I was afraid of this. We're so rigid we're stuck in time.

_*Infrastructurus prehistoricus*. I've read about this.

_DAY 80: I'm taking back control with IBM SOA solutions. Now we can align business goals with our IT. We have the hardware, software and services we need to respond to change. Strategy, planning and implementation are in tune with our specific business needs. Now we can deploy and update business processes faster and more efficiently.

_Goodbye, rigid past. Hello, flexible future.

Take the SOA business value assessment at:
IBM.COM/**TAKEBACKCONTROL**/SOA



Southern Charm

Hot technology and **warm corporate cultures** lure IT workers to these Best Places to Work. **By Gary Anthes**

THE SOUTH Atlantic region, home to nearly two dozen of *Computerworld*'s 2007 Best Places to Work in IT, offers everything from the activity of cities like Washington, Atlanta and Miami to the tranquility of the Blue Ridge and Great Smoky mountain ranges and hundreds of miles of beaches. There's something for everyone here, and for IT professionals with the right skills, there are job opportunities, too. Here's a look at three Best Places companies, their current IT projects and the skills they need.

Southern Co.

CIO: Rebecca Blalock
IT HEAD COUNT: More than 1,000
CURRENT IT PROJECTS: Massive integration and modernization of business systems; Windows Vista upgrade for desktops
CURRENT IT SKILLS SOUGHT: Windows, enterprise storage, C#, .Net, Java, GIS

SOUTHERN STYLE: With a name like "Southern" and headquarters in Atlanta, one could imagine that this $15 billion energy company might espouse some old-fashioned notions around things like honor, fairness and ethics.

Indeed, the company's "Southern Style" principles include three values: unquestionable trust, superior performance and total commitment. "They are the basis for everything we do," says Robert Morgan, a systems support Unix manager. "Ethics is stressed from the top down."

Although most companies at least pay lip service to such principles, Southern has several programs and practices to make them real, Morgan says. For example, he cites a leadership development program in IT that was established by CIO Becky Blalock. "She set up a team of people that cross all the towers within IT. They do a two-year rotation, and the focus is on making IT a great place to work."

Blalock's "Voice of IT" team conducts focus groups with managers and rank-and-file employees and has come up with a number of initiatives, Morgan says.

The company's values are traditional, but its technology is definitely 21st century. In a huge, companywide project, Southern is standardizing and overhauling old system silos so that it has just one system for each of the basic business processes, such as general ledger, accounts payable, supply chain and so on.

Much of that effort involves Oracle ERP and IBM Maximo application software and the Sun Solaris operating system. "This is one of the largest projects we have ever done in IT," Morgan says.

He adds that Southern is looking for IT skills of all types. In particular, he says, "enterprise storage is a critical area, and it's very difficult to bring in someone without experience because of the risk."

Julie Weeks, a human resources business consultant at Southern, says the company is also looking for people with C#, .Net, Java and GIS skills. "We've been seeing an increase in our hiring the last few years," according to Weeks. "We are an aging workforce, so we've had a lot of opportunity."

As a senior client services analyst at Southern, Marshalla Cofer's job is to act as a liaison between IT and the end users in the company's operating units, such as Georgia Power Co. "My job is to make sure they can do their jobs smoothly and efficiently," she says.

Cofer adds that the company encourages employees to periodically take stock of their positions, to think about what they want to do next and then to "take ownership of that, to pick the path where you want to go." She says she's currently thinking about moving into corporate communications.

In the meantime, Cofer is gearing up for her next big IT project — upgrading 28,000 PCs to Windows Vista.

Raymond James Financial Inc.

CIO: Tim Eitel
IT HEAD COUNT: 910
CURRENT IT PROJECTS: Client relationship management rollup; new corporate actions system
CURRENT IT SKILLS SOUGHT: Web services, C#, database

and systems administration, Windows development, networks and security

MULTITRACK EXPOSURE: In 2005, Raymond James Financial overhauled its IT organization and in so doing greatly expanded its project management office. The company also revamped its development methodologies and tools, presenting a great opportunity for Kelly Berenbaum and 14 other project managers in the new office.

Now Berenbaum, who had previously managed a team of imaging application developers, sits at the intersection of the company's technology and financial services activities.

"We as project managers put heavy focus on scope management, budget management, risk management and trying to get control of our projects," she says.

Berenbaum specializes in marketing projects, and her current big one is to help stitch together the systems and databases for the company's different financial services so that financial advisers and managers will have a holistic view of clients.

"We want to recognize client relationships rather than individual accounts," she says.

For example, Berenbaum says account managers would make better decisions about how to tailor services and fees in one area for a client if they knew what else Raymond James was doing for that client.

That will require building new SQL Server databases and Web applications using C# and presentation layer development tools from Infragistics Inc., she says.

Asked what she likes about her job, Berenbaum says, "We are not pigeonholed. We get a lot of technology exposure and a lot of business exposure working in the front lines with people developing strategies for Raymond James. Management really expects us to keep our skills current. That promotes loyalty when they care that you are competitive."

Care, indeed. CIO Tim Eitel says he feels strongly that his employees should be given the opportunity to try lots of different things, even knowing they won't always work out.

"Someone may say, 'I want to go into management,' but then, after a time, they don't like it, and they can certainly go back into the technical side with no penalty," he explains. Many technical people make more money than the managers they report to, he adds.

Asked to name his current No. 1 project, Eitel says, "I have 35 No. 1 projects going."

One of them, he says, involves working with Indian conglomerate Tata Group to develop a new system to handle the thousands of "corporate actions" — such as dividends or stock splits — that Raymond James must process each day. It will be a custom system built around Oracle, Unix and C#, and it will be owned jointly by Tata and Raymond James.

Eitel needs people with IT skills "across the board — database administrators, system administrators, Windows developers, network engineers and security engineers," he says.

Hiring people with financial experience is not important, Eitel adds. "We train them. We want them to have great ambition and great energy."

Marriott International Inc.

CIO: Carl Wilson

IT HEAD COUNT: 1,613

CURRENT IT PROJECTS: Automatic language translation for Marriott.com; enhanced support for BlackBerry users; enhanced automation for Marriott Rewards program

CURRENT IT SKILLS SOUGHT: Java, J2EE, WebSphere Portal and Administration, capacity planning

A COOPERATIVE ENVIRONMENT: It has been a profound transformation for the lodging giant. Not that long ago, a guest at a Marriott International hotel got his first impression of the place when he walked into the lobby. Lobbies still matter, of course, but now that first impression is much more likely to come from Marriott's Web site, says Sean McDermott, an information resources manager who heads up testing and quality assurance for Marriott.com.

McDermott takes a lot of pride in the Web site, through which $5 billion in bookings flow each year. "You can do a 360-degree look in a room, and photos are available of the pool and exercise room, the grounds, attractions in the local area and so on," he says.

A current project for McDermott is to greatly expand Marriott's global presence on the Web by automating the translation of English content for foreign-language Web sites. English to German has been completed, and the company is now working on Chinese and Spanish, he says.

In another Web-related project, Marriott is working to make it easier for guests to use points they have earned in the Marriott Rewards program. The idea is to automatically apply reward certificates to new reservations so that customers don't have to call up certificates from their accounts and apply them manually.

Asked what's special about Marriott, McDermott cites the loyalty employees have for the company. In fact, he says, the company recently established a program to recognize people with 50 or more years of service.

Sean Candy has progressed through several jobs at Marriott in 10 years: help desk technician, Windows systems administrator and project manager, Unix systems administrator and now product manager. One of the products he manages is the BlackBerry, which Marriott employees use in the field.

A current project seeks to enhance the uptime of BlackBerries and make problem resolution faster and easier. Marriott is looking for tools that can push monitoring down to the level of individual users.

"We are looking for first-contact problem resolution so it doesn't have to be escalated up to another help desk," Candy says. He notes that various vendors claim to have such tools, but it remains to be seen if they will do what Marriott wants.

Candy says he likes the "open and friendly" atmosphere at Marriott, where both peers' and managers' contributions are recognized. In IT, the environment is "more cooperative than competitive," compared with other places he has worked, he says.

"You get the opportunity to work in a lot of different areas," he adds. "They support your moves between groups, even if you don't have all the skills yet." ■

Special Delivery

UPS wraps up a multiyear project to speed package deliveries and save millions of gallons of fuel. **By Robert L. Mitchell**

PREMIER 100 IT LEADERS 2008 **BEST IN CLASS** This story is the fourth in a series showcasing the best projects of this year's Premier 100 IT Leaders.

United Parcel Service Inc.
With $7.5 billion in sales last year, UPS is the world's largest package-delivery company.

IT STAFF: 5,466 employees worldwide

IT CHAMPION: Mark Hilbush, vice president of information services

PROJECT PAYBACK:
Ten years in the making, UPS's package-flow technology rollout has increased productivity of package loaders by as much as 50% and increased route efficiency for drivers, shaving 29 million miles off delivery routes last year and saving 3 million gallons of fuel. UPS won't give exact dollar figures but says savings have been "in the millions."

NEITHER SNOW nor rain nor heat nor gloom of night stays these couriers from the swift completion of their appointed rounds. But, as United Parcel Service can attest, the back-end logistics can keep them from ever getting started.

This year, the world's largest package-delivery service is expected to finish the rollout of its Package Flow Technology project, an ambitious 10-year effort to revamp the way packages are received, loaded onto delivery trucks and routed to the appropriate destinations.

UPS's old system relied on workers loading the trucks to match the address on each package to the right truck and shelf location. To do their jobs, loaders needed to memorize a list of between 50 and 2,000 addresses and map them to the associated location ID number, truck number and shelf location within the vehicle. New hires required 35 days to get up to speed; route changes involved retraining.

The new system synchronizes the dispatch planning system containing package delivery data with a database of U.S. Postal Service addresses.

UPS receives information on incoming parcels before they come in, and matches up the appropriate loading and routing data. When packages arrive, they're scanned and a sticker is affixed with the proper loading information. Loaders simply read the label.

The system also helps drivers by providing, for every stop, a more accurate list of packages and where each is located on the truck. It used to take 19 seconds to pull packages. "We reduced it a good bit," says Chuck Findora, dispatch planning supervisor at the Westchester, Pa., package center. "They're spending more time delivering and less time looking for the package."

The system also allows for far better route optimization, saving 29 million miles of travel and 3 million gallons of fuel in 2007.

FILLING TRUCKS FASTER

Package loaders are also more efficient. "Before, a loader might have been able to load two vehicles a day. Now, it's not uncommon for them to load three," says Mark Hilbush, vice president of information services.

"Unionized labor is more expensive, so the ability to manage it more efficiently — that's important, especially when your biggest competitor is nonunion," says Donald Broughton, an analyst at Avondale Partners.

The toughest part of the project was database integration. "There were nights when I almost cried myself to sleep," says Jack Levis, director of package process management and business project manager for the package flow initiative.

To work, data had to match up exactly. It didn't. "Humans could match those up if the name 'Wal-Mart' was misspelled. For computers, that was a problem," he says. That issue has been mostly resolved.

Managing local servers and databases in hundreds of locations was also a challenge. "We created hundreds of small data centers," Levis says. While UPS initially relied on local administrators, that didn't scale. "Now we do as much management remotely as possible," he says.

Once UPS had pristine package data fully synchronized with its back-end systems, it could leverage that in new ways. "The data about the package [is] as important as the package itself," says Levis.

For example, loaders used to have to physically search for packages that customers decided to reroute or not send after all. Today, such requests can be processed through a single database update.

"The data they're using to manage assets is a marketable advantage," says Broughton.

If the response to the current system is any indicator, those changes will be well received. Findora says the 90 or so drivers in his package center can better plan their days and have fewer missed stops. "Not one of them would go back to the old way," he says. ■

> **"Before, a loader might have been able to load two vehicles a day. Now, it's not uncommon for them to load three.**
>
> [illegible] VICE PRESIDENT OF INFORMATION SERVICES, UPS

■ **SECURITY MANAGER'S JOURNAL** | **MATHIAS THURMAN**

Enough of Being The Bad Guy

Projects have gotten security reviews **at the last minute** once too often. Time for a **new process.**

Trouble Ticket

ISSUE: Projects are frequently delayed because security isn't considered early enough.

ACTION PLAN: Change the process so that the security manager will no longer be the forgotten man.

SECURITY ISSUES have a higher profile than they did a few short years ago, but too often, security managers still end up looking like the bad guy when they delay a project's go-live date.

Never mind that the real cause of the delay is the failure of project managers to give security a thought until just before they plan to roll out the new application to users. It's the security manager who says, "No, this can't be used in our environment without a security assessment." It's the security manager who seems to have no compunction about negating months of hard work with orders for reworks that mitigate the security problems.

I've talked before about how frustrating this sort of thing is for me. A couple of weeks ago, it happened again. A workflow application had been in motion for almost six months, but I wasn't briefed until T minus 10 seconds.

I hate being hit with the same problems again and again, and I try to avoid that by thinking of ways to change our processes. So, after I did my review of the workflow application, I tackled the project life-cycle management process.

First, I reviewed all the projects from the past couple of years and categorized them according to type. Next, I defined several high-level criteria that dictate whether a project needs security consideration.

I came up with 13 criteria, including projects that involve new applications, partner connectivity, a merger or acquisition, software as a service, new network architecture, and the handling and transfer of personal information or financial data. Project managers can look over the criteria when they initiate a new project and quickly determine whether it will require security attention. If it does, I should be included as a member of the project team.

■ **I hate being hit with the same problems again and again.**

BAKED-IN SECURITY

I want the project team to be aware of what I expect before I sign off on a project. To this end, I created an easy-to-use spreadsheet of requirements that project managers can use to ensure that security is "baked in" early in the project's life cycle.

Each requirement gets a tab in the spreadsheet and is as generic as possible so that it's highly adaptable. The requirements include application security controls, partner connectivity requirements, merger-and-acquisition due diligence items and security requirements for application service providers offering SaaS. I have columns for the risks associated with noncompliance and for the suggested test activity. The spreadsheet should make it easy for teams to self-inspect the security posture of their projects.

Another important change is that I have been designated a definition-phase approver for every project. Now I will be notified of all projects early on. This will allow me to ensure that I am included in projects that meet my criteria, just in case a project manager neglects to review my criteria list.

Before receiving this Phase 2 designation, I wasn't brought into the loop until Phase 5, which is the operational-readiness phase that occurs just before go-live. With my involvement moved up to Phase 2, projects will actually have a better shot at going live on schedule.

On the governance end, I have created a new metric for tracking the percentage of projects that get operational readiness approval on the first try. My hope is that by measuring the effectiveness of this new process, project managers will see the value of bringing security considerations to the preliminary stages of initiatives.

COMPUTERWORLD.COM

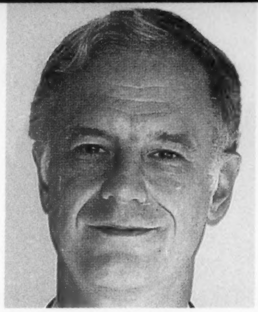
JOIN IN
To join in the discussions about security, go to **computerworld.com/blogs/security**

I'll probably continue to tweak this new process, but I'm already confident that I am going to be the bad guy a lot less often. ■

This week's journal is written by a real security manager, **"Mathias Thurman,"** *whose name and employer have been disguised for obvious reasons. Contact him at mathias_thurman@yahoo.com.*

OPINION

Bart Perkins



The Duck Project

EVERY ORGANIZATION has some "ducks." Ducks are employees who have a detrimental effect on productivity. Their work is consistently substandard, they rarely meet deadlines, and their skills are out of date. They hate change, resist taking responsibility, and blame their failures on co-workers. They constantly complain about their projects, their teammates, their workloads and their managers. They stifle innovation by shooting down new proposals, claiming that changes "just can't be done."

Every employee — even the one who appears to be a duck — deserves honest feedback and the opportunity to improve. Perhaps he is merely in the wrong job or has never had an honest performance appraisal. Feedback, training and a fair chance may transform a near duck into a productive team member.

Real ducks, however, are not interested in being transformed.

Ducks are dangerous to the health of your organization. Their lack of contribution de-motivates other employees. High performers are further demoralized by getting a raise that is only 1% higher than that of the duck in the next cubicle. Yet HR policies frequently demand extensive justification for raises or bonuses that are larger or smaller than what the corporate guidelines recommend.

Ducks enter your organization in various ways. They can be acquired through a merger, an acquisition, a promotion or an internal reorganization. You may even hire your own ducks, since it is almost impossible to get candid performance appraisals from past employers. The potential for litigation has caused many corporations to limit reference checks to merely confirming dates of employment. Many hiring mistakes result from a lack of comprehensive references.

In a perfect world, you would have very few ducks in your organization, and you could easily fire them or counsel them into jobs better suited to their skills. (Even ducks can say, "Would you like fries with that?") Realistically, there are times when you get hit with both barrels: a large number of ducks and inflexible HR policies. This deadly combination requires a creative solution.

Ducks are dangerous to the health of your organization.

Here's one I've heard about:

A decentralized Fortune 500 company with strong business units hired its first corporate CIO and gave him a mandate to rationalize IT across the business units. He quickly discovered many ducks among his staff. Why? For the previous decade, the business units had used the small, weak corporate IT organization as their "duck pond." It was much easier to transfer their ducks to corporate than to navigate the extensive process required to fire them.

The new CIO needed to quickly reshape his organization, but he was faced with HR policies that limited his ability to terminate nonperforming employees. He created a "duck project," a low-importance project whose main purpose was to provide a centralized location into which the ducks could be herded. This reduced the duck factor on other, higher-priority projects, increasing their likelihood of success.

After making sure that the executive team understood the duck project's real purpose (and had committed to protecting his IT head count), the CIO canceled the project and laid off its staff. He was then able to rebuild his IT organization and replace the ducks with productive employees. This approach saved money, increased IT delivery capability and improved department morale.

Some might claim that creating a duck project skates uncomfortably close to the edge of ethical practices. Others assert that a duck project is one of the few management techniques left to deal with large numbers of unproductive employees. These supporters argue that ineffective IT organizations are often outsourced completely, so it is better to sacrifice the ducks and save the rest of the IT department.

If ducks are weighing down your organization, consider rounding them up and declaring open season. Quack, quack . . . bang! ■

Bart Perkins *is managing partner at Louisville, Ky.-based Leverage Partners Inc., which helps organizations invest well in IT. Contact him at BartPerkins@LeveragePartners.com.*

Career Watch

■ Q&A

David Weldon

The **Aberdeen Group** analyst discusses the ins and outs of getting hired.

What are you seeing with respect to IT hiring practices? If there's an overriding theme in 2008, it's the quality of hire. Executives are finding they need to be a lot more diligent in screening applicants in terms of the skills they can bring to the job or that they can learn. They're looking for people who are a good fit: "We can train you so long as you fit well with our culture and the teams you'll be involved with, thus making you more likely to stay."

We hear mixed opinions from IT workers and hiring managers on the state of demand for IT professionals. What do you make of this? There are a couple of problems in matching skills. Companies that are looking solely for skills should [look instead at] experience. For instance, what kinds of projects or work has the technologist done? [Similarly] job applicants should promote the top projects they've worked on to help the company address its bottom line or business needs.

Another problem is that IT job roles are antiquated. People learn a lot of new technologies and skills in their job roles, but they become victims of their job titles. If someone has an older title, they may be somewhat tainted in the job market.

Part of the problem as described by hiring managers is that many IT job applicants hype their skills. That's a huge problem. You can present yourself as someone who has much higher qualifications in a Web development role. [It's like that old cartoon] "On the Internet, no one knows you're a dog." But the proof is in the pudding.

What are some best practices in determining the cultural fit of an IT job applicant? A lot of that can be determined in the early stages of the candidate and employer communicating with each other – verbal, written and face to face. How engaging is the potential employee?

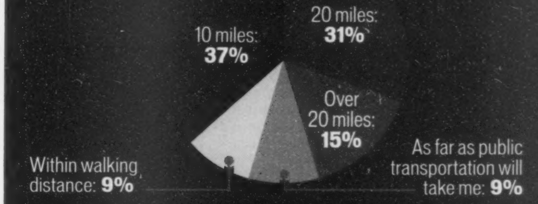
It's very easy to grade a bunch of employees and assess them on their résumés. But there's a burden on the employer to say, "This is what we're all about," and, "This is what we expect if you are to work with us. These are the skills and qualities of the people here."

– THOMAS HOFFMAN

Will Work for Gas Money . . .

It's been a while since anyone saw gasoline selling for under $3 a gallon, and the price of fuel is beginning to have an effect on the hiring market.

How far would you be willing to travel to a job?

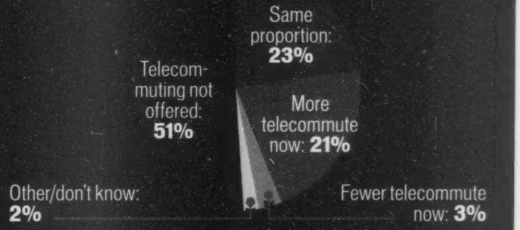


Note: Percentages don't add up to 100 because of rounding.

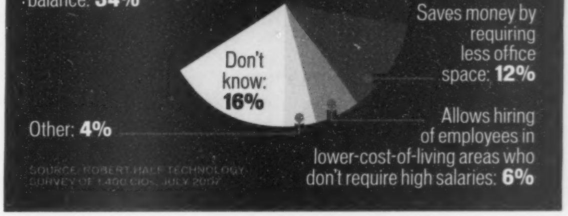
SOURCE: SNAGAJOB.COM ONLINE POLL OF MORE THAN 21,000 ADULTS, FEBRUARY 2008

. . . Or Just Stay Home

Does a higher or lower proportion of your IT staff telecommute today compared with five years ago?



Which of the following attributes of telecommuting is the greatest benefit to your firm?



SOURCE: ROBERT HALF TECHNOLOGY SURVEY OF 1,400 CIOs, JULY 2007

Executive Pay

Mean compensation (includes bonuses)

	Large enterprises	Midsize enterprises
CIOs	$181,240	$171,200
All executive IT positions	$143,847	$128,730

SOURCE: JANCO ASSOCIATES INC. SURVEY OF 27,884 IT STAFFERS AT 465 LARGE FIRMS (THOSE WITH OVER $500 MILLION IN REVENUE) AND 30,964 IT STAFFERS AT 871 MIDSIZE FIRMS (THOSE WITH $100 MILLION TO $499 MILLION IN REVENUE), CONDUCTED THROUGHOUT 2007 IN THE U.S. AND CANADA.

PAGE COMPILED BY JAMIE ECKLE.

Career Watch

■ Q&A

David Weldon

The **Aberdeen Group** analyst discusses the ins and outs of getting hired.

What are you seeing with respect to IT hiring practices? If there's an overriding theme in 2008, it's the quality of hire. Executives are finding they need to be a lot more diligent in screening applicants in terms of the skills they can bring to the job or that they can learn. They're looking for people who are a good fit: "We can train you so long as you fit well with our culture and the teams you'll be involved with, thus making you more likely to stay."

We hear mixed opinions from IT workers and hiring managers on the state of demand for IT professionals. What do you make of this? There are a couple of problems in matching skills. Companies that are looking solely for skills should [look instead at] experience. For instance, what kinds of projects or work has the technologist done? [Similarly] job applicants should promote the top projects they've worked on to help the company address its bottom line or business needs.

Another problem is that IT job roles are antiquated. People learn a lot of new technologies and skills in their job roles, but they become victims of their job titles. If someone has an older title, they may be somewhat tainted in the job market.

Part of the problem as described by hiring managers is that many IT job applicants hype their skills. That's a huge problem. You can present yourself as someone who has much higher qualifications in a Web development role. [It's like that old cartoon] "On the Internet, no one knows you're a dog." But the proof is in the pudding.

What are some best practices in determining the cultural fit of an IT job applicant? A lot of that can be determined in the early stages of the candidate and employer communicating with each other – verbal, written and face to face. How engaging is the potential employee?

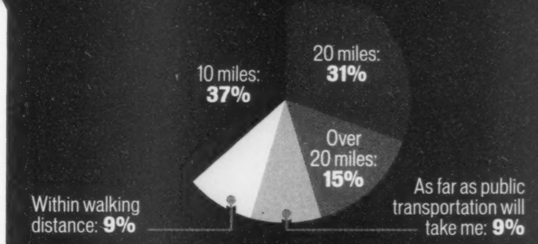
It's very easy to grade a bunch of employees and assess them on their résumés. But there's a burden on the employer to say, "This is what we're all about," and, "This is what we expect if you are to work with us. These are the skills and qualities of the people here."

– THOMAS HOFFMAN

Will Work for Gas Money . . .

It's been a while since anyone saw gasoline selling for under $3 a gallon, and the price of fuel is beginning to have an effect on the hiring market.

How far would you be willing to travel to a job?

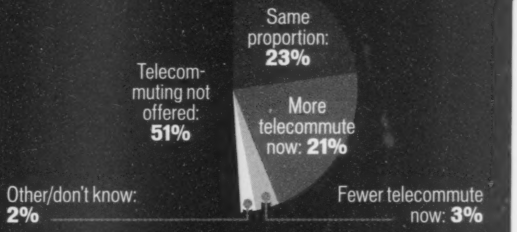


Note: Percentages don't add up to 100 because of rounding.

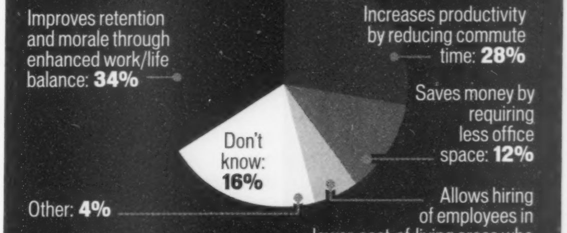
SOURCE: SNAGAJOB.COM ONLINE POLL OF MORE THAN 21,000 ADULTS, FEBRUARY 2008

. . . Or Just Stay Home

Does a higher or lower proportion of your IT staff telecommute today compared with five years ago?



Which of the following attributes of telecommuting is the greatest benefit to your firm?



SOURCE: ROBERT HALF TECHNOLOGY SURVEY OF 1,400 CIOs, JULY 2007

Executive Pay

Mean compensation (includes bonuses)

	Large enterprises	Midsize enterprises
CIOs	$181,240	$171,200
All executive IT positions	$143,847	$128,730

SOURCE: JANCO ASSOCIATES INC. SURVEY OF 27,884 IT STAFFERS AT 465 LARGE FIRMS (THOSE WITH OVER $500 MILLION IN REVENUE) AND 30,964 IT STAFFERS AT 671 MIDSIZE FIRMS (THOSE WITH $100 MILLION TO $499 MILLION IN REVENUE). CONDUCTED THROUGHOUT 2007 IN THE U.S. AND CANADA.

PAGE COMPILED BY JAMIE ECKLE.

IT|careers

Information Technology Manager w/Masters or for. equiv in Comp Sci. or Engg & 1 yr. exp. *Will accept Bach or for. equiv & 5 yrs of progressive work exp in lieu of Masters* or for. equiv. & 1 yr exp. Gather reqmts, plan, analyze, dsgn & prep UML diagrams using Rational Rose, dvlp UNIX/Windows based s/ware applics using industry's std OOA&D techniques, SDLC principles & s/ware dsgn patterns. Code & test projects using Java, J2EE, JSP, Servlets, EJB, XML, MQ Series, DB2 & WebSphere Applic Server. Supv 2 Prgmrs. Exp. as IT Analyst acceptable. Exp. prior to completion of education is acceptable. Mail resumes to: BCC USA-NJ, Inc. 43 Stouts Lane, Monmouth Junction, NJ 08852 Job Loc: Monmouth Junction, NJ or in unanticipated locations in US.

Manager, ETL Projects, Nashua, NH: Analyze business requirements and frame business logic for ETL based projects. Work with programming team (2 to 3) to automate processes using Unix scripting tools. Utilize ETL Informatica to plan data migration to enterprise database. Use Oracle, Oracle based technologies to provide data warehousing solutions. Test, troubleshoot, maintain existing applications. Reply to: Verusant Technologies, Inc., 74 Northeastern Boulevard #21B Nashua, NH 03062

Computer & Information Systems Manager w/Masters or foreign equiv in Comp Sci or Engg & 1 yr exp. Manage & direct MS SQL Server based s/ware performance tuning, migration, upgrade, T-SQL code optimization, capacity planning & dvlpmt projects. Architect, dvlp, test & application-tuning meth using OOA&D tech. Provide d/base modeling & systm layout to represent Static structural & Dynamic behavioral views. Perform Risk Analysis & Disaster Recovery planning. Use MS Project. Supv 3 Consultants. Exp as Sr. Consultant acceptable. Mail res to: Open Systems Technologies, 462 7th Ave, 15th Fl, NY, NY 10018 Job Loc.: NYC or in any unanticipated locs in USA.

Strategic IT Solutions seeks software engineers, system analysts. Duties include Linux, Oracle, Java, SAP, etc. Must have MS/BS with 1+5yr exp. Job site various. Send resumes to info@strategicits.com.

Beacon Technologies seeks programmer analyst to convert specifications to logical flow charts, develop web applications using WebSphere, DB2 to manage insurance/health claim data. Minimum BS/equiv with 1-yr exp job offered. Send resume: 11595 N Meridian St, #810, Carmel, IN 46032

Didn't find the IT Career that you were looking for?

Check back with us weekly for fresh listings placed by top companies looking for skilled IT professionals like you!

◆

For more details, contact us at: **800.762.2977**

IT|careers

CO-BRANDED EMAIL BLASTS

Reach your targeted audience of professional IT job seekers with Computerworld's Co-Branded Email Blasts. This unique program allows you to choose your criteria of 100% opt-in subscribers by geography, company size, job title and industry.

Call ITCareers Director of Sales,
Laura Wilkinson at 800-762-2977 for details!

COMPUTERWORLD IT CAREERS

ATTENTION...

Law Firms
IT Consultants
Staffing Agencies

Are you frequently placing legal or immigration advertisements?

Let us help you put together a cost-effective program that will make this time-consuming task a little easier!

Place your Labor Certification Ads here!

COMPUTERWORLD
COMPUTERWORLD
COMPUTERWORLD
The Disaster Recovery
Going Green

For more information contact us at:
800.762.2977

IT|careers

SharkTank

TRUE TALES OF IT LIFE AS TOLD TO SHARKY

Seemed Like a Good Idea at the Time

There's a new security policy at this company: At log-in, the username field will now be blank, and everyone will have to enter their usernames along with their passwords. Naturally, there are complaints the first day, and one is from a junior payroll employee who's leaving that afternoon on vacation. "Apparently, she couldn't tell the difference between the username box and password box, in spite of them actually being labeled as such," says a pilot fish in the know. Before she leaves to go on vacation, she types her password into the username field. And there it sits for two weeks. A support tech later logs in remotely to confirm that her PC is running correctly and closes the trouble ticket. "A few days later, confidential information about salaries and benefits shows up posted in public areas and in the cafeteria," sighs fish. "Apparently, somebody figured out how to log in as the vacationing payroll employee."

And Have a Nice Day

This company uses a Web interface to its systems, and it's accessible from any PC. "This requires a security fob," says a pilot fish there. "The idea – or so I thought – is to allow employees to access their company mail when they're away from the office." Fish tries it on his new home PC, but he gets a message that warns him about the site's certificate and tells him not to continue. He enters the security fob info and gets another warning, but this time he's able to collect his mail. Strange, fish thinks, and sends in a problem report. Response from the support tech: He can't work on the problem because fish is using a non-company-owned computer. "I wrote back saying that I thought that was the reason to have Web e-mail – to access my e-mail when I didn't have a company-owned computer," reports fish. "If I had one, I wouldn't need the Web e-mail. He responded that he was just following policy and closed my problem ticket."

Can't Be Any Less

New project manager takes over administration of the server room where this pilot fish hosts an internal application. "I figured it would be a good time to ask for a few updates that I've wanted," says fish. "In summary, the response was: No, we can't give you new hardware. No, we can't upgrade your OS this year. No, our database admin is too busy to take a look at your project. All of which I expected and could handle. The signature made me laugh, though: 'If you need any more help, please feel free to contact me.' Doesn't 'more' imply a nonzero quantity of help in the first place?"

■ *Send me a nonzero quantity of true tales of IT life at sharky@computerworld.com. You'll get a snazzy Shark shirt, quantity one, if I use it.*

COMPUTERWORLD.COM

DO YOU LOVE SHARK TANK? Then you might like Shark Bait, too. Dive in and dish the dirt with like-minded IT pros: **sharkbait.computerworld.com**.

CHECK OUT Sharky's blog, browse the Sharkives and sign up for Shark Tank home delivery at **computerworld.com/sharky**.

■ COMPANIES IN THIS ISSUE

Page number refers to page on which story begins. Company names can also be searched at computerworld.com

Aberdeen Group Inc. 41
ABI Research Inc. 12
Advanced Micro Devices Inc. 10
Amazon.com Inc. 8, 16
American Apparel Inc. 12
Apple Inc. 8
Applied Materials Inc. 32
Ask.com 16
AT&T Inc. 10, 12
Australian Law Reform Commission 12
Australian Office of the Privacy Commissioner 12
Avondale Partners LLC 38
BigReds.com Inc. 10
Buck Consultants LLC 29
Cambridge University 6
Capgemini 33
Carnegie Mellon University 8
Chubb Group of Insurance Companies 29
Citrix Systems Inc. 22
Columbia University 20
Computing Research Association 29
Connecting for Health 12
Cyveillance Inc. 10
Dell Inc. 16, 24
DigitalChalk Inc. 16
Edward Jones 30
EMC Corp. 8
Forrester Research Inc. 33
Gartner Inc. 14, 44
Georgia Power 36
Google Inc. 10, 16
HCL Infosystems Ltd. 12
Hewlett-Packard Co. 16
IBM 16, 36, 44
IDC 12
Infragistics Inc. 37
International Association of Outsourcing Professionals 32
International Longshore and Warehouse Union 16
Janco Associates Inc. 41
Leverage Partners Inc. 40
Marriott International Inc. 37
McDermott Will & Emery LLP 33
Microsoft Corp. 8, 12, 14, 44
MIR3 Inc. 20
Monsanto Co. 6
Monster.com 29
MySQL AB 8
National Notification Network LLC 20
New York State Assembly 8
NXP Semiconductor 22
Oracle Corp. 10, 36
PCI Security Standards Council 12
Proven Scaling LLC 8
Quest Software Inc. 22
Rackable Systems Inc. 16
Raymond James Financial Inc. 36
Robert Half Technology 41
Salesforce.com 10
SAP AG 10
SmugMug Inc. 8
SnagAJob.com Inc. 41
Southern Co. 36
Stevens Institute of Technology 33
Sun Microsystems Inc. 8, 16, 36
Tennessee Valley Authority 30
The Association for Communications Technology Professionals in Higher Education 20
The Global Sourcing Council 33
The Schumacher Group 10
The Tata Group 37
TomorrowNow 10
Tribal Group PLC 12
U.S. Bureau of Labor Statistics 29
U.S. Department of Energy 6
U.S. Naval Academy 6
U.S. Postal Service 38
United Parcel Service Inc. 38
University of California, Berkeley 8
University of Illinois at Urbana-Champaign 10
University of Kansas Medical Center 16
University of Vermont 20
Verari Systems Inc. 16
VeriSign Inc. 10
Virginia Polytechnic Institute and State University 20
VirtualLogix Inc. 22
Worcester Polytechnic Institute 6
Wyse Technology Inc. 22
Yahoo Inc. 8, 10
Yankee Group Research Inc. 10

[illegible]

Canon C2-1
www.usa.canon.com
Dell C3
dell.com/blades
Diskeeper 23
www.diskeeper.com/cwtrial
Fujitsu Computer Systems Corporation .. 17
us.fujitsu.com/computers/reliability
Hewlett-Packard Blades 25
hp.com/go/success66
Hewlett-Packard Software 13
hp.com/go/servicemanagement
Hewlett-Packard Storage 27
hp.com/go/virtualstorage6
IBM IT Campaign 5, 34-35*
ibm.com
IBM Mid-Market 34-35*
ibm.com/ibmaccess
Liebert 31
energy.liebert.com
LTO Ultrium 15
www.trustlto.com
Microsoft System Center C4
DesignedForBig.com
Microsoft Windows Server 2008 18-19
serverunleashed.com
Novell 9
www.moreinterop.com
SAS 3
www.sas.com/ostriches
SunGard Availability Services 21
www.availability.sungard.com/ia
TrippLite 11
www.tripplite.com

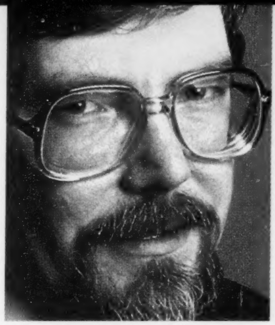
* Regional Select

This index is provided as an additional service. The publisher does not assume any liability for errors or omissions.

Periodical postage paid at Framingham, Mass., and other mailing offices. Posted under Canadian International Publication agreement PM40063731. **CANADIAN POSTMASTER:** Please return undeliverable copy to PO Box 1632, Windsor, Ontario N9A 7C9. Computerworld (ISSN 0010-4841) is published weekly: except for a single combined issue the first two weeks of July and the last two weeks of December by Computerworld, Inc., 1 Speen Street, Box 9171, Framingham, Mass. 01701-9171. Copyright 2008 by Computerworld Inc. All rights reserved. Computerworld can be purchased on microfilm and microfiche through University Microfilms Inc., 300 N. Zeeb Road, Ann Arbor, Mich. 48106. Computerworld is indexed. Back issues, if available, may be purchased from the circulation department. Photocopy rights: permission to photocopy for internal or personal use is granted by Computerworld Inc. for libraries and other users registered with the Copyright Clearance Center (CCC), provided that the base fee of $3 per copy of the article, plus 50 cents per page, is paid directly to Copyright Clearance Center, 27 Congress St., Salem, Mass. 01970. Reprints (minimum 100 copies) and permission to reprint may be purchased from Erik Eberz, Computerworld Reprints, c/o The YGS Group, Greenfield Corporate Center, 1808 Colonial Village Lane, Lancaster, Pa., 17601, (800) 290-5460, Ext. 150. Fax: (717) 399-8900. Web site: www.reprintbuyer.com. E-mail: computerworld@theygsgroup.com. Requests for missing issues will be honored only if received within 60 days of issue date. Subscription rates: $5 per copy: U.S. – $99.99 per year; Canada – $130 per year; Central & So. America. $250 per year; Europe – $295 per year; all other countries – $295 per year. Subscriptions call toll-free (888) 559-7327. **POSTMASTER:** Send Form 3579 (Change of Address) to Computerworld, PO Box 3500, Northbrook, Ill. 60065-3500.

■ FRANKLY SPEAKING

Frank Hayes



The New IBM

GARTNER SAYS Windows is "collapsing." Well, sure. Strictly speaking, Windows itself isn't in a state of collapse — Windows XP is still useful to a huge population of customers. But for Vista and the Windows franchise as a whole, things do not look good.

By coincidence, 15 years ago this month, Lou Gerstner arrived at IBM.

When he got there, Gerstner found a company that literally didn't believe in its own future. The mainframe business — the core of IBM — was collapsing. Other business units were busy trying to turn themselves into stand-alone companies that could be spun off. The big blue ship was sinking, and everyone wanted off.

Gerstner turned it around. The specific tactics are interesting: a shift to services as the primary business, a deep dive into the Internet and Linux, and a vow that IBM would no longer try to lock customers in. Mostly, though, those tactics were incidental.

What mattered was this: Gerstner led IBM to change. He had to. He understood that IBM's old way of doing business just wouldn't work any longer. With a plummeting stock price and 100,000 laid off, change was the only option.

And it worked.

Now consider Microsoft. For years, the cliché has been that Redmond is the new Armonk. And just as IBM faced disintegration when the mainframe business collapsed, Microsoft faces disintegration if Windows collapses.

But the parallel runs deeper. Far too much of Microsoft simply doesn't believe in its future.

The future is change. That's what makes it different from the *now*. But Windows is in trouble — and Microsoft is at risk — specifically because Microsoft won't change.

Microsoft's product design philosophy is still "ever bigger, ever more bloated." That worked when Moore's Law made CPUs and memory ever faster. But now the market opportunities are in phones, games and low-end laptops. Bigger isn't better — and Microsoft isn't changing.

■ Just as IBM faced disintegration when the mainframe business collapsed, Microsoft faces disintegration if Windows collapses.

Microsoft's software development approach — nightly builds and daily bug fixes for years on end — has been broken for a long time. It just won't scale for a code base as huge as that of Windows. There are other ways to do it — but Microsoft isn't changing.

Here's the worst part: Microsoft's approach to customers has always been old-school IBM: Lock 'em in. But the first rule of lock-in is this: Never break your customers' software. And the second rule is this: Never force a product on customers that breaks their software when the previous version still works fine.

Vista breaks applications. It breaks device drivers. It breaks the strongest reasons for customers to stay with Microsoft. It actually threatens to break Microsoft's customer lock-in.

That's the one change Microsoft can least afford. And it's the change Microsoft is actually plunging headlong into.

That may sound appealing to us in corporate IT — after all, we hate to be locked in. But we really do need vendors who *want* to lock us in. When vendors stop caring, we stop getting anything useful from them. We certainly need that from Microsoft.

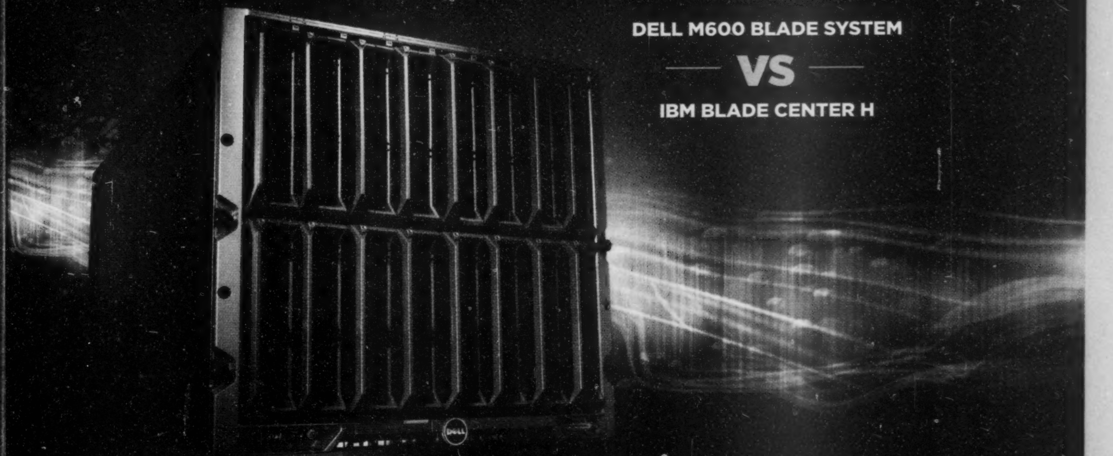
And we need Microsoft to find new ways of designing and developing Windows — radical reinventions of Windows, perhaps, but reinventions that don't break our apps, our infrastructure or our users' training.

Most of all, we need someone to lead Microsoft into all this change. Someone who understands that Microsoft's old ways are collapsing. Someone who understands that the future is the only option.

Let's hope Microsoft starts looking for that leader soon. Lou Gerstner isn't available. ■

Frank Hayes *is Computerworld's senior news columnist. Contact him at frank_hayes@computerworld.com.*

28%
BETTER
PERFORMANCE
PER WATT

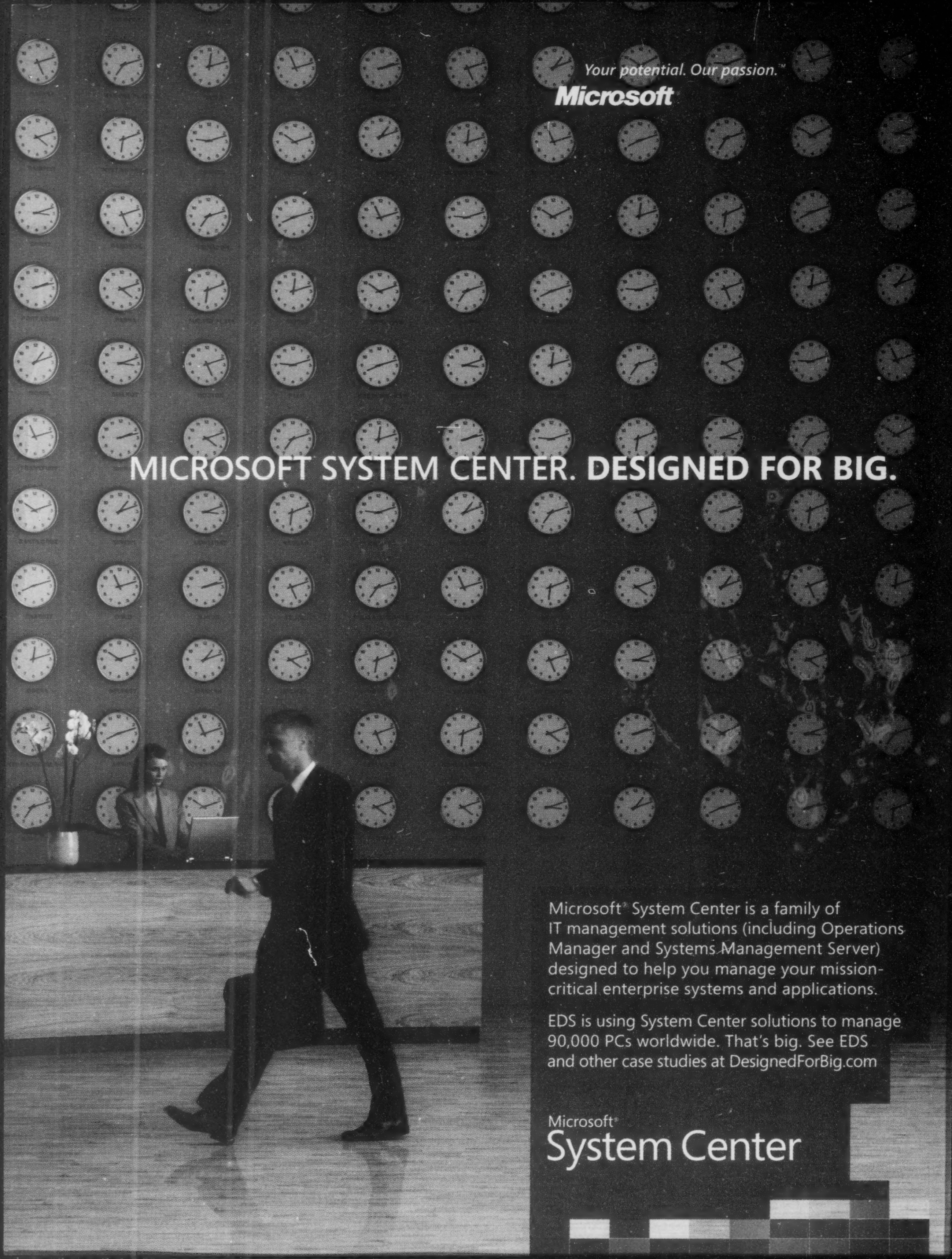


DELL M600 BLADE SYSTEM
VS
IBM BLADE CENTER H

GET MORE PERFORMANCE PER WATT AT
DELL.COM/Blades or call 866.212.9338

DELL

Based on Principled Technologies' "SPECjbb2005 performance and power consumption on Dell, HP, and IBM blade servers" December 2007 test report commissioned by Dell.



Your potential. Our passion.™

Microsoft

MICROSOFT SYSTEM CENTER. **DESIGNED FOR BIG.**

Microsoft® System Center is a family of IT management solutions (including Operations Manager and Systems Management Server) designed to help you manage your mission-critical enterprise systems and applications.

EDS is using System Center solutions to manage 90,000 PCs worldwide. That's big. See EDS and other case studies at DesignedForBig.com

Microsoft®
System Center